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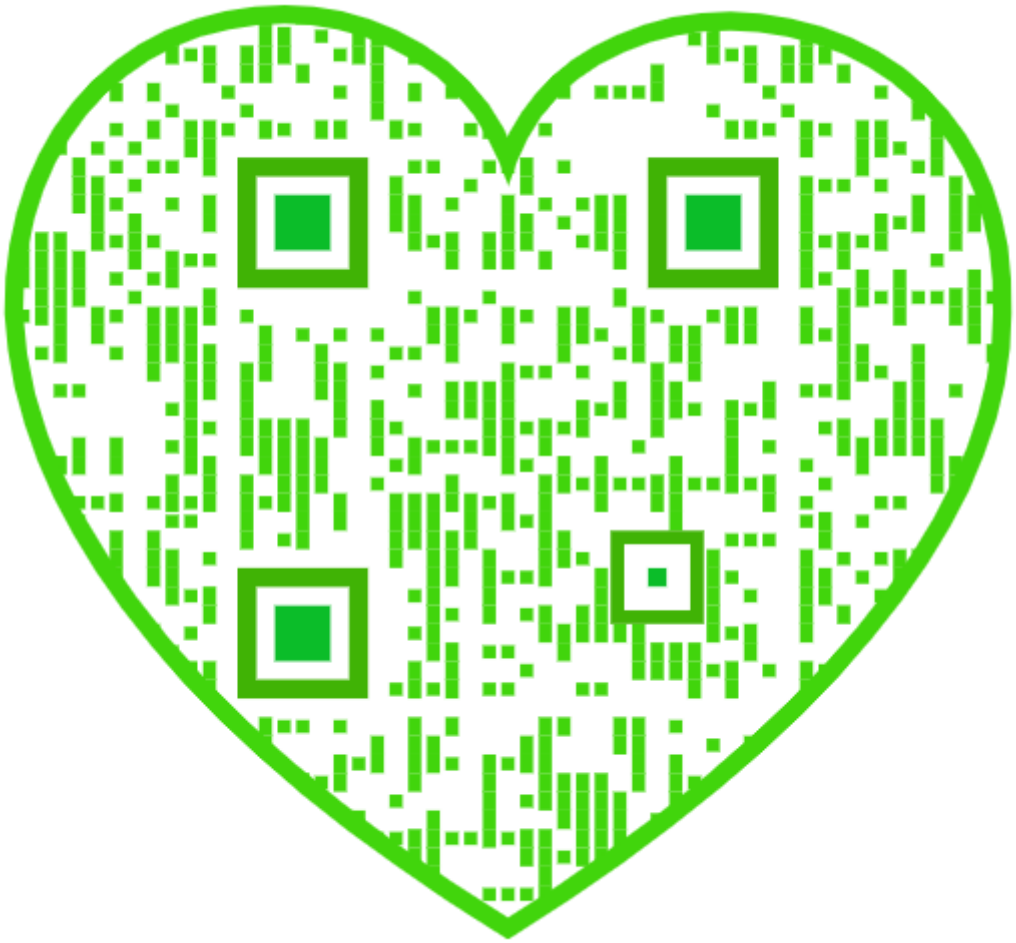
PRINCIPLES OF BOOKKEEPING AND FARM ACCOUNTS

BEXELL AND NICHOLS



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PRINCIPLES OF BOOKKEEPING

AND

FARM ACCOUNTS

BY

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PREFACE

FARMING is the oldest and in many respects the most important occupation of man. It dates back beyond the dawn of history, yet one of the modern "Captains of Industry" recently remarked that "Farming is the most modern business in the world." This is certainly true as regards the application of sound business methods.

In the mad rush for wealth and power, we seem to have lost sight of the true principles of economy. One of these principles is the art of keeping accounts. One of the greatest authorities on bookkeeping says, "The ability to pre-determine results by means of accurate accounts and statistics is the highest development of the modern business man." That the farmer needs to develop the same ability to "pre-determine results" needs no argument. Very few farmers of to-day have a definite knowledge of their business.

Farm accounts must be simple, easily kept, and readily understood to make them effective and practical. Hon. James Wilson says: "I would not impose on a busy farmer the keeping of an elaborate set of books, but some simple form of accounts will be a great aid in successful farming." Mr. John Hamilton, Farmers' Institute Specialist, says: "In my judgment no single study outside of the essential branches of writing, reading, and arithmetic would be of more service than the study of an efficient method of keeping accounts. It is a universal need."

In *The Country Gentleman* magazine, the following clear statement of the need of up-to-date business methods for the farmer is made: "Business methods are indispensable. The man who does not know what his annual income is should wake up and find out. Only bookkeeping will do the trick. After he has adopted it he may discover that he has been relying on some one crop to make up for the deficiencies of others. Then his sins of omission will rise up against him like a nightmare, and he will be convinced that business is business just as truly as farming is farming — and that the latter cannot thrive without the former."

The authors and publishers of this book feel that this great need can best be met by introducing bookkeeping and business methods in both graded and ungraded schools where there are boys and girls who are looking forward to agriculture as a life work. They realize that they are attempting pioneer work and therefore lay no claim to perfection. It is their hope that they have to some extent, at least, met the present need for a textbook of this kind, and laid the foundation for better work along this line in the future.

The forms and bookkeeping methods which they have used have stood the test of extensive use, and are put forward with full confidence that they will be found satisfactory for purposes of instruction and equally satisfactory for actual farm use.

J. A. BEXELL,
F. G. NICHOLS.

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PRINCIPLES OF BOOKKEEPING

INTRODUCTORY

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1. A business transaction is an exchange of values in the form of property or service. Thus it will be seen that a gift is not, properly speaking, a business transaction.

2. If one's business consists of only a few transactions, it may not be necessary to record them, but if the transactions are many, it is not safe to trust to memory. They should be properly recorded in books arranged conveniently for this purpose, and the art of making such records is called bookkeeping.

3. It is often necessary to show other people facts about our business transactions, and this can be done only by means of accurate records. Young people should early cultivate the habit of making records of daily receipts and expenditures, and also of all credit transactions. Such a practice will serve as a check on extravagance and inculcate systematic business habits that will be of incalculable value in later life.

4. Bookkeeping, as is stated above, is a systematic record of business transactions. The objects of keeping books are to preserve a permanent history of a business and to be able, at any time, to determine its exact financial condition. Properly kept records also furnish us details of business that show one who knows how to interpret them just where the gains are being realized and where losses are being sustained. Annual comparisons make it possible to conduct business more intelligently and to produce profits that justify the expenditure of labor and money necessary to carry on a business enterprise.

5. All records that are made at the time the transactions take place for the purpose of being summarized later under appropriate heads, are known as original records. In case of legal disputes between the parties to such transactions, these original records are the only ones that are accepted as evidence in a court of law, and they are accepted only when properly made. There must be evidence of accuracy and system, therefore all bookkeeping work should be done with the greatest possible care. Aim to be neat and accurate in your work — speed will be a natural and necessary result for which you need not consciously strive.

LESSON 1

RULING AND PREPARING FORMS

6. A great many bookkeeping forms are standard and can be purchased from stationers almost anywhere, but often it becomes necessary to prepare labor-saving records especially suited to a particular business. To be able to design a suitable form and to rule it properly is a valuable accomplishment. As in all mechanical work, proper tools are of the utmost importance. For the next exercise, you will need the following: A sharp pencil, two penholders with medium fine pens, a ruler, red and black fluid (not ink), a sheet of horizontally ruled paper, and a clean blotter.

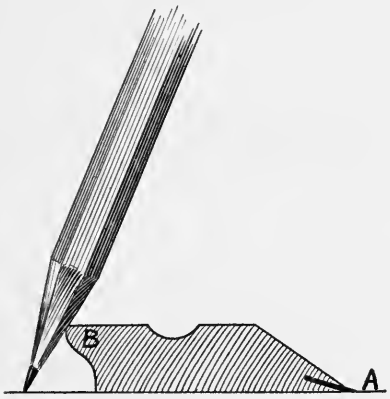


Illustration O

7. Always keep your pencil well sharpened. Use neither too hard nor too soft lead. The pen points of a new pen should be moistened and thoroughly wiped before using, because each pen was oiled before it was packed, to prevent rusting. The beveled edge of the ruler is used for ruling. See illustration O.

Written Exercises

(1) Place the sheet of blank paper so that the lower edge is parallel with the edge of the table or desk. Place the ruler with the numbered edge toward you (*A*) and the sharp edge down. Along the beveled edge (*B*) rule as many red lines as you can without moving the ruler, by merely tipping the pen. You will rule a better line by drawing the pen rapidly and lightly. Practice until you can rule a perfectly smooth and straight line.

(2) Rule a dozen lines with lead pencil and then trace them with the red ink pen. See how truly and smoothly you can do the tracing.

(3) Rule a red line on either side of each blue line on a sheet of horizontally ruled paper. Draw the red lines as close as possible to the blue line without having the lines touch each other. Use the blotter freely.

(4) On a slip of paper 8 inches wide, plan the form shown in illustration 1, page 10. Allow $\frac{2}{8}$ inch for each cents column and $\frac{3}{8}$ inch for each of the dollar

columns. Now from your sketch mark the spaces at the top and 15 lines below on a horizontally ruled sheet, and then rule the form completely with red fluid.

(5) In a similar manner rule the forms shown in illustrations 2 and 3, pages 14, 15, 18, and 19, using $\frac{1}{4}$ of a page for each form. Use both sides of the paper.

Hand in your work for approval.

LESSON 2

PRIVATE PERSONAL ACCOUNTS

8. The foundation for business success should be laid early by learning the value of money and its correct use. All successful business men agree that this can best be done by systematically recording our cash receipts and expenditures, and by mastering the art of bookkeeping at an early age.

9. It should be remembered that all the advantages and comforts we enjoy are the results of labor and saving. There could be no civilization, no comfortable homes, no schools, no churches, no enjoyments without saving. Savings are generally measured in money, and it is, therefore, regarded as one of the most desirable forms of property.

10. We can learn many important lessons from the experience of successful business men; how they laid the foundation of their business success. Countless illustrations could be given from every walk of life. Successful farmers, merchants, manufacturers, and bankers all agree that the four fundamental principles of their success are: (1) Labor, (2) Business Enterprise, (3) Skill and Knowledge of One's Business, and (4) Economy or Saving.

11. Knowledge of one's business is gained primarily from records and accounts, and true economy is generally the result of carefully analyzing these records. It is not only the actual information the accounts and records afford, but the attitude toward one's business and the indirect effect which are the most important results of carefully kept accounts.

12. In order that the accounts shall be of greatest value, it is of the utmost importance that a correct classification be made. One must decide in advance just what information is desired and then arrange the records accordingly, just as the architect prepares his plans before the building is begun.

13. In the personal accounts illustrated in lessons 2 and 3 the different classes of receipts and expenditures are printed at the head of the columns, as

Cash Account

Date	Items	Receipts	Payments							
			Total	Clothing	School	Refreshments	Amusements	Sunday School Offering	Gifts	Sundries
1912										
9/20	From mother	20								
20	Coat 10¢ Books 1¢		12	10 50	1 50					
25	Shoes 3¢ Post cds 10		3 60	3 50						10
26	Show .20 Candy .10		30			10	20			
28	Church 5¢		05					05		
30	Ink 5¢ Eraser 5¢		10		10					
	Balance 3 95	20	16 05	14 00	1 60	10	20	05		10

Illustration 1

in illustrations 1 and 2, pages 10, 14, and 15, and the results are found in the totals of the different columns.

14. In the next exercise we shall use what is known as a special column cash book. All the columns except the totals are called distribution columns. Note that the sum of the footings of the distribution columns equals the footing of the total columns. Every page should be proved before the amounts are forwarded. It is generally best to forward the total amounts from month to month until the end of the year.

Rockefeller's Ledger

Speaking of his early struggles and of the foundations of his success at a social gathering of young men, Mr. Rockefeller said:

"I have brought with me to show you young men a little book — a book which may interest you. It is the first ledger I kept. I was trained in business affairs and I was taught how to keep a ledger. The practice of keeping a little personal ledger by young men just starting in business and earning money and requiring to learn its value is, I think, a good one. . . . .

"This little book shows largely what I received and what I paid out during my first years of business.

"I paid my own bills, and always had a little something to give away, and the happiness of saving some. It is true I could not secure the most fashionable cut of clothing. I did not make any obligations I could not meet. I lived within my means, and my advice to you young men is to do just the same.

"Now let me leave this little word of counsel for you. Keep a little ledger, as I did. Write down in it what you receive, and do not be ashamed to write down what you pay away. See that you pay it away in such a manner that your father or mother may look over your book and see just what you did with your money. It will help you to make money, and that you ought to do."

Written Exercise

Below are the receipts and expenditures of a young girl during the first three months of school, eighth grade. In making her purchases she was assisted by her mother, but she kept her accounts just as if she had made them independently. The experience proved a valuable lesson, as it showed her how much she cost her parents.

Directions. On a practice sheet rule a cash account as shown in illustration 1, page 10. Use the form in lesson 1 if it is satisfactory.

With a ruler mark the spaces on a separate slip of paper $\frac{2}{8}$ inch for each cents column and $\frac{3}{8}$ inch for each dollar column, or $\frac{5}{8}$ inch for each money column. This will require $5\frac{5}{8}$ inches of the right side of your page; $\frac{3}{8}$ inch will be required for the date column at the left. The remainder of the space will be the items column. Place the slip at the top of the page and mark the lines to be ruled; do the same at the bottom. Now complete the ruling, which may be done in pencil in this exercise. Write the present year at the top of the date column and then fill in the transactions with not more than two entries on each line. The first six lines will be exactly as illustrated.

Transactions

Date

Sept. 20 — Cash from mother, $20.
20 — Coat, $10.50; books, $1.50.
25 — Shoes, $3.50; post cards, 10¢.
26 — Amusement, 20¢; candy, 10¢.
28 — Church, 5¢.
30 — Ink, 5¢; eraser, 5¢.

Oct. 1 — Medicine (sundry column), 50¢.
2 — Ice cream, 10¢; ribbons, 30¢.
3 — Pencils, 10¢; paper, 10¢.
6 — From mother, $7.
8 — Church social, 15¢; nuts, 10¢.
9 — Amusement, 50¢.
11 — Necktie for brother, 25¢.
12 — Umbrella, $1.50; cap, 50¢.
14 — Oranges, 10¢; skating, 10¢.
15 — Notebook, 10¢; picnic, 25¢.
16 — C. Endeavor, 10¢; Sunday School, 5¢.
19 — Rubbers, 65¢.
20 — Book, 85¢; car fare, 10¢; pictures (gift), 15¢; handkerchief, 25¢.
24 — Sunday school, 5¢.
25 — Tablet, 10¢; pens, 5¢.
28 — Entertainment, 25¢; candy, 15¢.
Nov. 1 — Medicine, 75¢; gloves, 25¢.
3 — Pencil, 5¢; skating, 10¢.
4 — Cash from mother, $9.
5 — Sunday school and church, 20¢.
7 — Sandwiches, 15¢; popcorn, 5¢.
8 — Stockings, 50¢; dress, $2.50.
11 — Tablet, 5¢; eraser, 5¢.
15 — Church social, 15¢; ribbon, 10¢.
16 — Amusement, 20¢.
17 — Car fare, 10¢; stamps, 10¢.
19 — Paints, 25¢; cookies, 10¢.
22 — Missions, 20¢; Y. W. C. A., $1.
26 — Stationery (gift to George), 50¢.
27 — Notebook, 15¢; ink, 5¢.
29 — Ice cream, 20¢; candy, 10¢.

Now total each column and write the sum in light lead pencil figures until found correct. Prove your work by adding together the totals of all the columns to the right of the total column. This should equal the sum of the total column. When found correct, write the totals in ink. Show the balance.

Hand in your exercise for approval. When it is returned to you, copy it on the ruled sheet provided for the records of this lesson.

LESSON 3

STUDENTS' ACCOUNTS

15. Henry Jones, having finished his high school course, has now entered college. His father has promised to advance two thirds of his expenses on condition that he report at the end of each semester his receipts and expenditures on the following form:

CASH ACCOUNT FROM TO 191

RECEIPTS:		PAYMENTS:	
For work	$	For board and room	$
From home		For clothing	
Unclassified		For laundry and toilet	
		For fees and dues	
		For books and stationery	
		For furniture	
		For amusements and refreshments	
		For travel	
		For doctor and medicine	
		For church and benevolence	
		For gifts	
		For savings	
		For unclassified	
		Balance	
	$		$

16. For the purpose of enabling him to fulfill the conditions, he has adopted the form of cash book shown in illustration 2, pages 14 and 15.

17. In the "Board and Room" column are entered all regular expenses under this head, but no extra lunches or refreshments. Under "Clothing" are entered purchases and mending, but not pressing and cleaning, which are entered under "Laundry and Toilet." The remaining columns are self-explanatory, except the "Unclassified" column; in it are entered all items which cannot properly be entered in the special distribution columns. It is only another name for "Sundries."

Receipts For the month of _____

Unclass	From Home	For Work	Balance	Total	Date	Items
53 40				53 40	Sept. 20	Balance on hand Amounts forwarded
	100			100		From home
						Entrance fee $7, Barometer $1, Lab. fees $5.50
					21.	Board & room 3/20 to 1/4 $10, Baggage transfer 25¢
					23	Text books $7, Stationery 55¢
					24	Laundry 60¢, Shoes repaired $1, Mother's birthday $1/
					25	Library table & chair $5, Theater 75¢, Student's loan fund $25.25
						Club dues $1, Dentist $2, Hair cut 35¢
10		5		15	26	From Uncle Bin $10, Splitting wood $5,
						Trip to Eugene $2.35, Y. M. C. A. $1,
					30	Accident Insurance ($1000) $2.25, Carfare 10¢
63 40	100	5		168 40		Amounts forwarded

Illustration 2

18. For convenience, the receipts are entered on the left, or debit side and the payments on the right, or credit side. A total column is provided for both the receipts and expenditures.

19. It is preferable to carry the totals forward until the end of the year, rather than to forward only the balance.

Written Exercise

Directions. Unless ruled paper is provided in your outfit, you will rule the form shown in illustration 2, pages 14 and 15, on a double page of practice paper, first, with pencil, and have it approved, and second, with pen and ink. Allow the same space for the money columns as in the last lesson. Write or print the headings very plainly. Use the form prepared in lesson 1 if it is satisfactory.

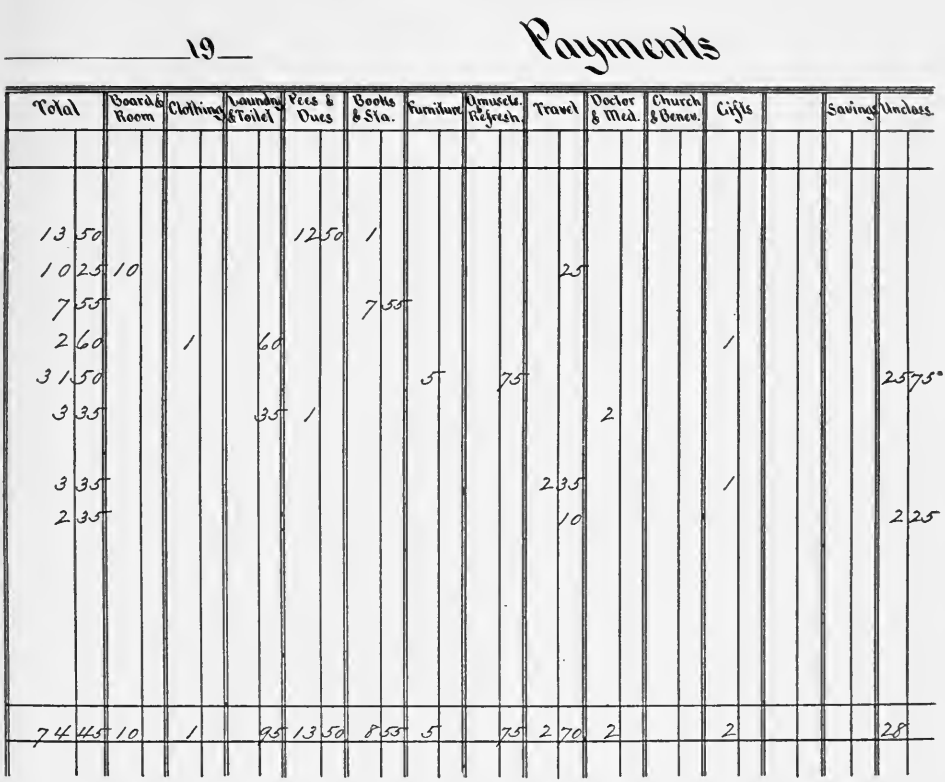


Illustration 2

You will then write up the receipts and payments for a part of September and all of October, present year. September 20 to 30 will be exactly as illustrated.

Transactions

Sept. 20 — Amount of cash on hand, $53.40. (In both the total and unclassified columns.)

20 — From home, $100.

20 — Entrance fee, $7; barometer, $1; laboratory fees, $5.50.

21 — Board and room, 9/20 to 10/4, $10; baggage transfer, 25¢.

23 — Textbooks, $7; stationery, 55¢.

24 — Laundry, 60¢; shoes repaired, $1; mother's birthday gift, $1.

25 — Library table and chair, $5; theater, 75¢; paid Students' Loan Fund and interest, $25.75 (unclassified).

Sept. 25 — Jefferson Club, $1; dentist, $2; haircut, 35¢.
26 — From Uncle Ben, $10; received for splitting wood, $5; trip to Eugene, $2.35; Y. M. C. A., $1.
30 — Accident insurance, $2.25 (policy $1000); car fare, 10¢.
Oct. 2 — Gloves, $1.10; book, 95¢; post cards, 30¢.
3 — Laboratory apron, 35¢ (unclassified).
4 — Jefferson Club, $1; dentist, $2; board and room, $5.
5 — Films, 50¢; dictionary stand, $3.50; laundry, 75¢; medicine, 25¢; car fare, 15¢.
7 — From H. C. Smith for work on lawn, $5.
8 — Football game, 50¢; Y. M. C. A., $1.
10 — Suspenders, 75¢; photo developer, 30¢.
11 — From home, $50; deposited in savings bank, $10.
12 — Paid for 10 shares Student Coöperative, $10 (savings); board and room, $5; from C. R. Brown for care of furnace, $10.
14 — Fraternity dues, $1; stamps and paper, 50¢.
15 — Trip home for Thanksgiving, $6.30; photo supplies, $1.
16 — Laundry, 75¢; barber, 50¢.
17 — Car fare, 20¢; board and room, $10.
18 — Hat, $3; medicine, 25¢.
19 — Lunch, 60¢; bath sponge, 50¢.
21 — Received for typewriting, $4.80; college annual, $2.50.
22 — Fees for chemicals, 75¢; bay rum, 25¢ (toilet).
23 — Developing paper, 75¢; Seeley's History of Education, $1.25.
24 — Necktie, 50¢; suit pressed, $1.
25 — Loaned to E. R. Jones for 1 mo., $10.
26 — Junior Party, $2; shoe polish, 25¢; paid typewriter rental, $3 (fees & dues); music lessons, $5.
28 — Received for typewriting, $5; received for care of furnace, $5; World's Work, $1.50; Success Magazine, $1.

Prove the payments. The sum of the footings of the distribution columns must equal the footing of the total column. Prove the receipts in the same manner. Find the balance and enter it in the balance column.

What per cent of the total receipts is the total amount received from home? The amount received from work? The unclassified? What per cent of the total payments is the total of each payment column?

Hand in your exercise for approval.

Optional Exercise

Prepare a record sheet, similar to the one just completed, and keep a record of your own cash receipts and expenditures for the balance of the school year, and submit it to your instructor for credit. Prove the work at the end of each page before forwarding the totals to the next.

LESSON 4

HOUSEHOLD ACCOUNTS

20. In a recent experiment in New York City, it was found that, if a family would regularly estimate in advance the amount to be spent per year for the several classes of expenditures in the average family, greater economy and a better living would result.

21. Below is a table of suggested percentages of expenses in families of five members:

Amount to Spend	Total	Food	Rent	Gen. Exp.	Cloth-ing	Recrea-tion
Ideal division [1]	$100	$25	$20	$15	$15	$25
$2000 to $4000	100	25	20	15	20	20
$800 to $1000	100	30	20–25	10	15	25–20
$500 to $800	100	45	15–20	10	10	20–15
Under $500	100	60	15	5	10	10

22. The student should study the above table and compare the results with his mother's estimates of her family expenses.

23. In the exercise which follows, it is assumed that the family consists of the parents and three children. The eldest daughter, Coral, has become interested in home management and has decided to keep accurate accounts of the family income and expenses.

24. The household has a cash allowance of $75 per month and the income from the garden and poultry. The total extra income is about $200 a year, counting the produce used by the household. All the household expenses, clothing, furniture, recreation, etc., are to be paid out of this income. Thus far it has been possible to save $10 a month, which is placed in the local savings bank at four per cent compound interest.

[1] Where the income is sufficient to warrant it.

Household Accounts

Receipts						Date	Items
Poultry		Garden		Cash	Total		
				35 40	35 40	Nov. 1	Balance on hand
				75	75		Monthly allowance — Sugar $1, Bacon $1
1	75				1 75	3	Sold 5 doz. eggs to Kline @ 35¢
							Shoes 3.50, Concert $1
							Hdkf. 25¢, Gift books 2.35
						7	Collection 25¢

Illustration 3

25. The monthly bills should be filed in an envelope and preserved for future reference. This is especially important in the case of bills for furniture and articles which should be included in the annual inventory. Write the month and year on the envelope and file it in a suitable box or tray.

Written Exercise

Directions. If a ruled sheet is not provided, rule on a double page of horizontally ruled paper the form shown in illustration 3, pages 18 and 19, and write up the following transactions in the same manner as in lessons 2 and 3.

Transactions

Nov. 1 — Balance on hand, $35.40.

1 — Monthly allowance, $75.

1 — Sugar, $1; bacon, $1.

3 — Sold 5 doz. eggs to Klines at 35¢; shoes, $3.50; concert, $1.

3 — Hdkf., 25¢; gift books, $2.35.

7 — Collection, 25¢; telegram, 60¢; meat, 50¢; butter, 80¢; trip to Albany, $2; hair cut, Eddie, 35¢.

7 — Sold potatoes, $5; sold 7 doz. eggs, $2.40; dress, $4; collars for Ella, 40¢; medicine, 50¢; mittens, 50¢; salt mackerel, 55¢; flour, $1.25; gloves, $2; stationery, 50¢ (Library); meat chopper, $1; dishes, $2.75.

For Month of _____ 19__

Total	Groceries	Meat	Dairy	Clothing	Furnit. & Utensils	Help & Laundry	Library	Light & Fuel	Church & Gifts	Phy. & Medicines	Personal	Savings	Travel & Recrea.	Sundries
	Payments													
2	1	1												
4 50				3 50									1	
2 60									2 35		25			
25									25					

Illustration 3

Nov. 14 — Collection, 25¢; laundry, $1.65; help, $3; light, $ 1.20; magazine binder, 75¢ (Library); stamps, 25¢ (Sundries); k. chairs, $1.30; cleaning, $4.

17 — Books, $2.40; stove polish, 10¢; concert, 40¢; rubbers, 60¢; butter, 80¢; L. A. Society, 50¢; doctor, $1.

22 — Sold 10 qt. canned raspberries, $2.50; trip to Dayton, $1; coffee, 90¢; roast, 75¢; taffeta silk, $5.60; waffle iron, $1.10; help, $2.65.

24 — Coal, $2.50; cards, 60¢; vaccination, 75¢; gasoline, 90¢; heating stove, $13; butter, 80¢; laundry, $1; waist, $2.50.

26 — Sold 10 qt. strawberries, $2.50; sold 2 pullets, 80¢; bought fruit, $4.15; steak, 40¢; sausage, 20¢.

26 — Hat, $4; beans, 50¢; telephone rental, $1; e. l. globes, 50¢; stationery, 50¢; rocker, $7.50; help, $2.

29 — Club, $2; toweling, 70¢; shoes for G., $2.75; savings bank, $10; Ella, $1; George, 50¢; butter, 40¢; doily for M., 20¢; liniment, 25¢; fly paper, 10¢; Madrid and return, $2; B. powder, 50¢; candles, 10¢; church paper, 25¢.

Prove the work. The sum of the totals of the payment distribution columns must equal the amount of the total column. Prove the receipts in the same manner.

Inventory of Household Goods.

Date

Furniture			
1 Dining Room Table	8		
6 " " Chairs @ 2.00	12		
1 Buffet	20		
Total Furniture			40
Utensils			
2 Laundry Tubs @ 75¢	1	50	
4 Pails " 25¢	1		
3 Brooms " 15¢		45	
Total Utensils			2 95

Illustration 4

Optional Exercise

A. Take a complete inventory of your mother's household goods, giving as nearly accurate prices as possible. Classify them under the following headings: Furniture, Utensils, Library, Clothing, Unclassified. Write down the items under each class on a separate slip and then copy them on journal paper in the form shown in illustration 4.

Ascertain how much fire insurance your father is carrying on the household goods. If your father's house and the contents should burn, he could secure from the insurance company only so much damage as he could prove he had sustained, up to the amount stated in his policy. He could scarcely be expected to remember all the many items of furniture in the house, therefore this inventory you have made should be kept on file somewhere outside of your home, and in case of fire it will be extremely valuable in proving the amount of loss.

B. Ask your mother for permission to keep her accounts for the next year on the plan outlined in lesson 4. Special credit will be given for this work.

C. Take an inventory of all the supplies and equipment in your school or in your department. The instructor will assist you in fixing prices. Classify under the following headings: Furniture; Apparatus; Books, Charts, and Maps; Supplies; and Miscellaneous. Use the same form as in the household inventory.

D. Prepare an expense record for the school with the same classification as the inventory and such other additional headings as the teacher may suggest, and record the expenditures for the school reported from time to time by your instructor.

LESSON 5

REVIEW QUESTIONS

On Lessons 1, 2, 3, and 4

(The number of the question corresponds to the number of the paragraph containing the answer to the question.)

1. Name one important kind of business transaction.

2. State two ways of keeping track of business transactions and point out the advantage of each.

3. What is the peculiar advantage of written records of business transactions?

4. Define the term "record" and illustrate. Define "bookkeeping."

5. What are "original records" and what is their peculiar value?

6. Why is it important to be able to construct special records and do proper ruling?

7. What important points should be remembered in reference to stationery and tools?

8. Discuss the importance of early learning the correct use of money.

9. How are the comforts we enjoy secured? Discuss the importance of saving.

10. What are the fundamental requirements of success?

11. What is the value of proper records in addition to the results they contain?

13–14. What are distribution columns and how are they used?

17. State what is entered in the several columns in lesson 2.

18. Why are the receipts entered on the left and the payments on the right? What is the advantage of the total columns?

25. How should the monthly bills be filed and preserved?

Portland Junior Poultry Association

Name _____ Month _____

Egg Record

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total		
						12	12		
11	8	17	11	14	12	16	89		
12	17	10	10	17	9	14	89		
13	10	10	10	11	11	12	77		
14	12	14	8	12	12	14	86		
8	17						25		
					Total for Mo.		378		

Illustration 5

LESSON 6

POULTRY ACCOUNTS

26. The preceding lessons were devoted entirely to cash receipts and expenditures, since the object of private accounts is merely to record the use we make of our money.

27. In every productive business, however, it is very important to know at all times the *cost* of producing a given article so as to avoid losses and insure the permanent success of the business.

28. The process of finding the exact net cost of any article or service is called cost accounting.

29. There are three elements which enter into the cost of anything you make, buy, or sell: (1) Labor, (2) Material, (3) Overhead Charges or Expenses. All must be accounted for, in order to find the true cost of an article.

30. The story of how Clarence Hogan of Portland, Oregon, won $100 in gold for excellence in work connected with the "Portland Junior Poultry Association" should be interesting to every boy. In judging the contest, good record keeping was given 20 points, and good business methods in marketing was given

Portland Junior Poultry Association

Name _____ Month _____

Food Record (weight in lbs.)

Date	Wheat	Corn	Oats	Bran	Beef Scrap	Cut Bone	Grit	Shorts		
2	4	1		1				1		
	23	6		6			1	6		
	17	3		6			1	6		
	22	4		6			1	6		
	27	7		7			1	7		
Total	93	21		26			4	26		
Price	1.24	.42		.35			.08	.46		

Illustration 6

10 points out of 100. With an average of 22 chickens and 1 rooster he made a profit of $62.10 and won $100 besides for his enterprise and attention to business.

His letter to Professor Dryden in regard to his work is so interesting and suggestive that it is given below:

PROFESSOR JAMES DRYDEN,
Corvallis, Oregon.

DEAR SIR:

Boys and girls should raise chickens in the city as well as on the farm because it pays well and is a fine occupation. It is a work that never grows tiresome and new experiences are always awaiting you. Various theories are advocated as to the proper manner of housing and feeding to get the best results, but simple rules are the best to begin with. Plenty of clean water, clean houses and yards, and good feed, are needed to get the best results. Spade up a little in the chicken yard every day that it is pleasant, but if it is cold and wet weather provide a scratching shed. Keep your hens busy. Read the bulletins furnished free by

Cash Book of Clarence Hogan's Poultry Business

Date	Items	Receipts	Payments							
			Total	Wheat	Corn	Oats	Bran	Grit	Shorts	Unclassified
19–										
Oct. 30	Balance on hand	3								
30	From Father-note 6%	20								
31	22 Hens @ 75¢		16 50							16 50
	1 Rooster		2							2
Nov. 30	64 Eggs for Mo. @ doz. 50¢	2 67								
30	149 lb. Wheat		2	2						
	8 lb. Corn		16		16					
	4 lb. Grit		08					08		
	Balance 4 23									

Illustration 7

the government and the various experiment stations. Also subscribe to a good poultry paper. The ideas you will get from these, together with your own experience, will make you a successful poultry raiser. By doing all that was stated above I was able to win first prize in the poultry contest just closed.

Yours truly,

CLARENCE A. HOGAN.

31. In the exercise which follows, the care of the chickens is the labor; the feed, spraying material, etc., are the materials; the twenty-three dollars Clarence starts with represents the capital; cleverness, good judgment, and activity in starting the business represent the enterprise.

32. In finding the cost of labor, it was found that it required approximately half an hour each day to conduct the business. The value of his time was placed at twenty cents an hour.

33. Note one thing in particular. He has correct ideas about business. He does not expect anything for nothing. At the outset he borrowed $20 from his father at 6 per cent interest. This he paid promptly when due.

WRITTEN EXERCISE

Let us now examine his records. Illustration 5, page 22, is a reproduction of his egg record and illustration 6, page 23, of his food record. Illustration 7 is

a good form of cash book and one you are already familiar with from lessons 2 and 3. He kept a separate set of books with his business; his personal accounts he kept in a different book like the one used in lesson 2.

By checking the Egg and Food records with the cash book for January, you will readily understand their uses.

Directions. On two pages (not opposite) of practice paper rule the form shown in illustration 7. In this case allow $\frac{2}{8}$ inch for the cents and the same for the dollars in the payment column, and $\frac{3}{8}$ in. for the dollars in the receipt column. The "items" and "date" columns will occupy the rest of the space. No ruling need be done if ruled sheets are provided.

You may now write up the accounts on the form you have prepared from the following:

TRANSACTIONS

Oct. 30 — Balance on hand, $3.
30 — Borrowed of father on my note at 6 per cent, $20.
31 — Bought 22 hens at 75¢; 1 rooster, $2.
Nov. 30 — Sold 64 eggs for the month at 50¢ doz.
30 — Bought 149 lb. wheat, $2; 8 lb. corn, 16¢; 4 lb. grit, 8¢.
Dec. 31 — Sold 199 eggs for the month at 55¢ doz.
31 — Bought 110 lb. wheat, $1.47; 28 lb. corn, 56¢; 5 lb. grit, 10¢; 19 lb. bran, 25¢; 25 lb. shorts, 44¢; hoe, 75¢; spade, $1; bucket, $1; lice killer, 25¢.
Jan. 31 — Sold 378 eggs for the month, at 50¢ doz.
31 — Bought 93 lb. wheat, $1.24; 21 lb. corn, 42¢; 26 lb. bran, 35¢; 4 lb. grit, 8¢; 26 lb. shorts, 46¢.
Feb. 28 — Sold 319 eggs for the month, at 45¢ doz.
28 — Bought 97 lb. wheat, $1.29; 25 lb. corn, 50¢; 24 lb. bran, 32¢; 4 lb. grit, 8¢; 24 lb. shorts, 42¢.
Mar. 31 — Sold 410 eggs for the month, at 30¢ doz.
31 — Bought 98 lb. wheat, $1.47; 31 lb. corn, 62¢; 27 lb. bran, 36¢; 4 lb. grit, 8¢; 27 lb. shorts, 47¢.
Apr. 30 — Sold 358 eggs for the month, at 25¢ doz.
30 — Bought 73 lb. wheat, $1.10; 23 lb. corn, 46¢; 25 lb. bran, 35¢; 4 lb. grit, 8¢; 25 lb. shorts, 44¢.
30 — Paid father's note, $20; interest, 60¢.
May 31 — Sold 321 eggs for the month, at 25¢ doz.

May 31 — Bought 81 lb. wheat, $1.22; 17 lb. corn, 34¢; 26 lb. bran, 35¢; 4 lb. grit; 8¢; 26 lb. shorts, 46¢.

June 30 — Sold 308 eggs for the month, at 30¢ doz.

30 — Bought 80 lb. wheat, $1.20; 7 lb. corn, 14¢; 25 lb. bran, 35¢; 4 lb. grit, 8¢; 25 lb. shorts, 44¢.

July 31 — Sold 290 eggs for the month, at 30¢ doz.

31 — Bought 104 lb. wheat, $1.56; 26 lb. bran, 35¢; 4 lb. grit, 8¢; 26 lb. shorts, 46¢.

Aug. 31 — Sold 243 eggs for the month, at 35¢ doz.

31 — Bought 95 lb. wheat, $1.66; 36 lb. bran, 48¢; 4 lb. grit, 8¢; 36 lb. shorts, 63¢.

Sept. 30 — Sold 144 eggs for the month, at 40¢ doz.

30 — Bought 60 lb. wheat, $1.05; 34 lb. bran, 40¢; 4 lb. grit, 8¢; 34 lb. shorts, 59¢.

Oct. 31 — Sold 71 eggs for the month, at 45¢ doz.

31 — Bought 54 lb. wheat, 96¢; 35 lb. bran, 42¢; 4 lb. grit, 8¢; 35 lb. shorts, 61¢; paid rent for the chicken house, 60¢.

Oct. 31 — Prize, $100.

Your results should agree with the statement in the next lesson.

LESSON 7

THE FINANCIAL STATEMENT

Definitions

34. A *resource* is anything *we own*, such as cash, land, horses, books, etc., and what others owe us. It represents something of value to us. A *liability* is a debt which *we owe* others.

35. When a business transaction costs more than we realize from it, we sustain a *loss*. When we get more out of a business venture than it costs us, we make a *gain*.

36. A *resource inventory* is property on hand or an amount owing to the business not shown in the records. A *liability inventory* is an amount owing by the business to others not shown in the records.

37. *Depreciation* is the reduction in value which property suffers by use or otherwise.

38. The *net present worth* of a business at any time is the difference between the resources and the liabilities.

Financial Statement of Clarence A. Hogan
October 31, 1915

Inventory Nov. 1, 1914			
1 Rooster	2		
22 Hens	16	50	
Cash	4	50	23
Due Father			20
Net Worth			3

Illustration 8

39. By *gross cost* is meant total cost. By *net cost* is meant the total cost less any discounts or other deductions. In making articles the cost of each article is found by dividing the actual cost of all the articles by the number produced.

40. A *financial statement* is a summary of the resources and liabilities of a business at a given date, and the losses and gains for a given period. In it is sometimes included various other information such as a statement of cash receipts and payments, detailed inventories, and the like.

Written Exercise

On a sheet of paper ruled like illustration 8, prepare the statement given on the next page by filling in the blanks from the cash book in the last lesson.

Financial Statement of Clarence A. Hogan

October 31, 1915

Inventory, Nov. 1, 1914.
1 rooster
22 hens
Cash
Total
Due father
Net worth
Inventory, Oct. 31, 1915.
1 rooster
22 hens
Implements (less 10 per cent depreciation)
Cash
Total

Statement of Loss and Gain

Net worth now
Net worth last year
Total gain
Prize
Gross gain on chickens
Less labor for 365 days, 10¢ a day
Net gain for enterprise
Total number eggs sold, 3105, or 258 $\frac{3}{4}$ doz.
Total cost:
Cash
Labor
Total
Net cost per dozen is "total cost" ÷ "total no. doz."

LESSON 8

REVIEW QUESTIONS

On Lessons 6 and 7

26. To what kind of transactions are private accounts limited?
27. What special kind of records are important in a productive business?
28. Define cost accounting.
29. What elements enter into the cost of an article?
31. In a poultry business, what corresponds to these elements?
32. Do you regard the pay allowed Clarence as satisfactory? How much would this be a month?
33. What important lessons did you learn in paragraph 33?
33. What special lesson can you learn from Clarence's financial methods?
34. Define a resource; a liability.
35. Define a loss; a gain.
36. What is a resource inventory? A liability inventory?
37. Define depreciation.
38. Define the net worth of a business.
39. Explain how to find the cost of an article.
40. Define a financial statement and tell what it contains.

LESSON 9

DEBITS AND CREDITS

41. In any business, things are bought to be sold. All such things are called *merchandise.*

42. Merchandise may be paid for at the time it is received, or a promise of future payment may be given if both buyer and seller agree to this method of settlement. Money and all kinds of written promises or orders which may be promptly exchanged for money at their full or face value, are called *cash* in bookkeeping. A post-office money order, an express money order, and a check are some of the more common forms of cash.

43. When merchandise is bought on a promise of future payment, it is said to be purchased *on credit.* The promise of future payment may be either oral, or written in the form of a promissory note.

Received		Parted with	
500 bu. Wheat @ 1	500	Cash	500
Cash	120	100 bu. Wheat @ 1.20	120
50 bu. Beans @ 3	150	Cash	150
Cash	105	30 bu. Beans @ 3.50	105
200 bu. Millet @ 1	200	Cash	200

Illustration 9

Written Exercise

Directions. Draw a line vertically through the middle of an ordinary sheet of horizontally ruled paper. In beginning business you would find it necessary to *buy* merchandise before you could *sell* any. In writing your records you would naturally begin on the left-hand side of the sheet. Therefore, you would naturally write the record of your purchases on the left side of the dividing line, and later, when you sell this merchandise, you would complete the lines, writing on the right side of the vertical line. The name *debit* has been given to the records on the left side and the name *credit* to those on the right side.

January 1, 1913

L.F.			
	Mdse.	500	
	Cash		500
	Bought 500 bu. Wheat @ 1.00		
	2		
	Cash	120	
	Mdse.		120
	Sold 100 bu. Wheat @ 1.20		
	3		
	Mdse.	150	
	Cash		150

Illustration 9b

Enter the following transactions on the sheet you have prepared as shown in illustration 9, page 30, observing the directions regarding left and right sides of your page.

1. Bought 500 bu. wheat at $1 and paid cash.
2. Sold 100 bu. wheat at $1.20 and received cash.
3. Bought 50 bu. beans at $3 and paid cash.
4. Sold 30 bu. beans at $3.50 and received cash.
5. Bought 200 bu. millet at $1 and paid cash.
6. Sold 100 bu. millet at $1.30 and received cash.
7. Sold 200 bu. wheat at $1.25 and received cash.
8. Bought 60 bu. beans at $3 and paid cash.
9. Sold 40 bu. beans at $3.50 and received cash.
10. Bought for cash 200 bu. oats at 65¢.

44. From this exercise it will be seen that all things that come into the business are *debited* and all things that go out of the business are *credited*. This is the only rule that need be remembered in connection with this class of transactions.

45. An *account* is a collection of debits and credits arranged under an appropriate name. For example: cash account as it was written up in the pre-

ceding lessons. All cash received was placed on the left side and all cash paid out was entered on the right side.

The Principles of Double Entry

46. There are two general methods of keeping accounts. Single entry, by which are kept accounts with persons only. Double entry, by which are kept accounts, not only with persons, but with property and allowances.

47. Double entry is greatly superior to single entry; first, because it enables us to detect many errors in our work which could not be found readily by single entry; and, second, it enables us completely to analyze our profits and losses with reference to their sources.

48. You have unconsciously used double entry in the exercises you have already written up. You will remember that every payment in the private cash accounts was entered in *both* the "total" and the distribution columns. There never was any exception to this. Cash was credited for the payment and one or more of the distribution columns was debited. You will remember that we could balance our cash on every page or at the end of every month. The footing of the "total" column equaled the sum of the footings of the distribution columns. The same was true of the cash receipts. This was truly double entry though restricted to cash and impersonal transactions. In order to master the art of double entry, we must now study its principles and, in several exercises, learn how to apply them.

49. In the double-entry system of bookkeeping there is a debit for every credit and *vice versa*. This is on the theory that every transaction involves an exchange which must eventually result in an income and a corresponding outlay, or several incomes and several outlays.

50. The account is the basis of all bookkeeping and to their proper accounts all entries are destined. The only book that is absolutely essential to double entry is one arranged for classified accounts. Others are used, however, for convenience. We have seen that the forms in lessons 2 and 4 answer this purpose to a limited degree by using the columns as accounts.

51. The ledger is the book of accounts, while other books are books of original entry. The usual form is shown in illustration 11, page 41.

52. The left side of the ledger is called the debit, and the right, the credit side.

53. (*A*) When a person takes something from the business without giving

some material thing in return his account is *debited* or *charged.* When the business receives something from a person without giving any material thing in exchange, the person's account is *credited.*

(*B*) When something comes into the business an appropriate impersonal account is debited. When something goes out of the business an appropriate impersonal account is credited. For example, when money or its equivalent is received, cash account is debited. When money or its equivalent is parted with, cash account is credited.

Illustrative Examples

On January 1, 191–, Clarence Hogan, being a thrifty young man, is alert for a chance to make a profit with his savings. We have seen that he is also methodical and accurate in his business. We find the following memoranda in his notebook.

Transactions

"Jan. 1. I have on hand $125 and I have decided to buy a certain horse for $100, because my father thinks he will soon be worth much more.

"Jan. 4. Bought a bay four-year-old colt, Jim, of Robert Williams for $100 cash.

"Jan. 5. Bought feed for $5 cash.

"Jan. 20. Sold Jim for $150 cash."

He wishes to find out the result of his venture and to put the story of his transactions in a little more systematic form. He opens a cash account as follows:

Cash

DEBIT		(RECEIVED)						(PAID)				CREDIT			
Jan.	1	On hand			125		Jan.	4	For Jim			100			
	20	For Jim			150			5	For feed			5			
									Balance			170			
					275							275			

This cash account is not satisfactory to Clarence. What he wants to know, besides his cash record, is how much he made on the horse deal, and how he made it. He, therefore, decides to analyze his whole venture. In this he is assisted by his teacher. His instructor explains each transaction, step by step, as follows:

Jan. 1. "There are two accounts involved in this transaction: cash and yourself. So one is opened with the title 'Cash' and another, 'Proprietor,' as follows:

PROPRIETOR

DEBIT						CREDIT				
					Jan.	1	Investment			125

CASH

DEBIT		(RECEIVED)				CREDIT		(PAID)		
Jan.	1	On hand		125	Jan.	4	Paid for Jim			100
	20	For Jim		150		5	Paid for feed			5

"(1) Note that we record things or promises that come to the business on the left, or debit, side.

"(2) We record things or promises that go from the business on the right, or credit, side.

"This is merely a convenient custom growing out of the method of recording business transactions illustrated in lesson 9. In this transaction cash is a thing coming into the business and is, therefore, debited. The business is obligated or expected to repay the Proprietor (yourself) the investment you put into it, and, therefore, the Proprietor's account is credited."

"Remember that in double-entry bookkeeping the business is an impersonal idea entirely apart from the owners.

We now come to the second transaction.

Jan. 4. "Here, again, we have two accounts: the horse which comes into the business is, therefore, debited (1); and the cash which goes out is, therefore, credited (2). We therefore open another account.

HORSE

DEBIT		(COST)				CREDIT		(RETURNS)		
Jan.	4	Cost		100	Jan.	20	Sold for			150
	5	Feed		5						

Jan. 5. "Here, also, we have two accounts: 'Feed' comes into the business and is, therefore, debited (1) (but since it is consumed by the horse, we debit the horse with it); and cash goes out and is, therefore, credited (2).

Jan. 20. "Here once more we have two accounts: Cash coming in is debited (1); Horse going out is credited (2). This completes the records. By turning to the Horse account we find that the returns, or credit, side is $45 larger than the cost, or debit, side. The net result of the transaction is, therefore, a gain of $45."

Summary of Principles

54. We have now reached a point where we can summarize the rules for determining the debits and credits in business transactions.

The Proprietor

(1) *Debit* the proprietor for all withdrawals for personal use and for the net loss of the business.

(2) *Credit* the proprietor for his investments and for the net gain.

Property

(3) *Debit* property that comes into the business.

(4) *Credit* property that goes out of the business.

Persons

(5) *Debit* persons when they receive something from our business without giving us some material thing, such as a note or money, in return.

(6) *Credit* persons when they give us something without receiving some material thing in return.

Allowances

(7) *Debit* allowances made by the business to others.

(8) *Credit* allowances made to the business by others.

The Law of Debit and Credit

55. Rules 1 to 8 may be stated as a general law as follows:

Debit that for which we exchange something of value.

Credit that for which we get something of value in exchange.

LESSON 10

MODEL SET

56. The object of this set is to illustrate the principles of debits and credits, as stated in paragraphs 41 to 55, and other bookkeeping processes such as posting, taking trial balance, making balance sheet, and closing the ledger. The simplest figures have been used, the object being to illustrate bookkeeping and not commercial arithmetic.

57. Remember that while in itself the form may often be of little value, it is of the greatest importance in the early stages of your study. The form used in the model has been approved by the best accountants for centuries. The student should, therefore, give it the closest attention.

58. In recording a business transaction, it is of the utmost importance that all the essential facts of the transaction be recorded and that the statement be sufficiently detailed so as to admit of no misunderstanding of its meaning.

59. In actual business, where transactions are numerous, it is customary to classify them in four books of original entries, the cash book, sales book, purchase book, and journal, as illustrated in lesson 55, but the principles of debit and credit are most readily understood by using only the journal-daybook, and therefore only this book will be used in this set. It is conveniently ruled for indicating the debits and credits that are necessary in recording business transactions. Proper space is allowed for amounts and explanations.

Written Exercises

(*A*) You will now copy the model journal, illustration 10, pages 38, 39, and 40. Four pages of journal paper will be required. Note that the totals of the money columns are equal at all times. Number the pages from 1 to 4. On a separate sheet write the reason for every entry, as shown in the illustrative examples, pages 33, 34, 35. Credit will not be given for this lesson unless this is done. Having copied the journal hand it to your teacher for approval.

(*B*) Using the form illustrated in the model journal, make the proper journal entries for the ten transactions in lesson 9, page 31.

(*C*) You will now copy the model ledger, illustration 11, pages 41, 42, and 43, omitting the arrow pointed lines. You will use four pages of paper. Number the pages. Give one third of the page to each account. Write the

titles in a clear, large hand. You will do all the horizontal ruling in red ink. Observe that the single line extends only through the money column, while the double line extends through all except the items columns. Rule directly *on* the blue line and note in accounts 2 and 3 that the ruling is done on the same blue line on both sides of the account, even if the number of entries are unequal.

(*D*) You will now copy the trial balance and statements. You will need two pages of journal paper, arranged the same as the model, illustration 12, pages 44 and 45. Only one form of trial balance should be used. By taking all the totals, as shown in the first two columns, their sum will equal the total of the journal columns. If only one side agrees with the journal, it is known that the other is wrong and must be checked to find the error. It is best, therefore, to use totals instead of balances.

(*E*) Having copied the entire model, you will now trace every entry from the journal to the ledger, from the ledger to the trial balance, and from the trial balance to the statement. Feb. 1, 2, and 4 are traced by connecting lines in the first three accounts in the ledger. You have now noticed that every entry in the journal is found under the corresponding account in the ledger, that the sum of the journal entries equals the sum of the ledger entries and that the two sides are equal. Hence the term "double entry."

Feb. 1, 19–

L.F.			
	George Brown, Proprietor, engaged in buying and selling farm produce with a cash investment of $100.00		
2	Cash	100	
1	George Brown		100
	2		
	Bought for cash 80 sacks potatoes @ 1.00		
3	Produce	80	
2	Cash		80
	2		
	Bought of Nolan & Son on acct. 100 potato bags @ 10¢		
4	Expense	10	
10	J. M. Nolan & Son		10
	3		
	Paid rent of store in cash 5.00		
4	Expense	5	
2	Cash		5
	4		
	Sold for cash 5 sacks potatoes @ 1.20		
2	Cash	6	
3	Produce		6
	5		
	Paid Gazette-Times for Advertising 1.00		
4	Expense	1	
2	Cash		1

Illustration 10

Feb. 6, 19—

	Bought of George Armstrong on acct.		
	100 boxes apples @ 1.00		
3	Produce	100	
6	George Armstrong		100
	8		
	Sold to John North on acct.		
	50 boxes apples @ 1.20		
7	John North	60	
3	Produce		60
	9		
	Sold Richard Gilmore on acct.		
	20 bu. potatoes @ 1.20		
8	Richard Gilmore	24	
3	Produce		24
	10		
	Sold George Lang on acct.		
	10 sacks potatoes @ 1.20		
9	George Lang	12	
3	Produce		12
	11		
	Paid Arthur Brown for cartage 4.00		
4	Expense	4	
2	Cash		4
	20		
	Sold to Julian Hotel on acct.		
	50 boxes apples @ 1.20		
5	Julian Hotel	60	
3	Produce		60

Illustration 10

Feb. 21, 19–

	John North paid his account in full		
2	Cash	60	
7	John North		60
	24		
	Paid J. M. Nolan & Son in full		
10	J. M. Nolan & Son	10	
2	Cash		10
	25		
	Sold George Lang on acct: 5 sacks potatoes @ 1.20		
9	George Lang	6	
3	Produce		6

Inventories Feb. 28, 19–

Produce		
40 sacks potatoes	40	
Expense		
100 potato bags	10	

Illustration 10

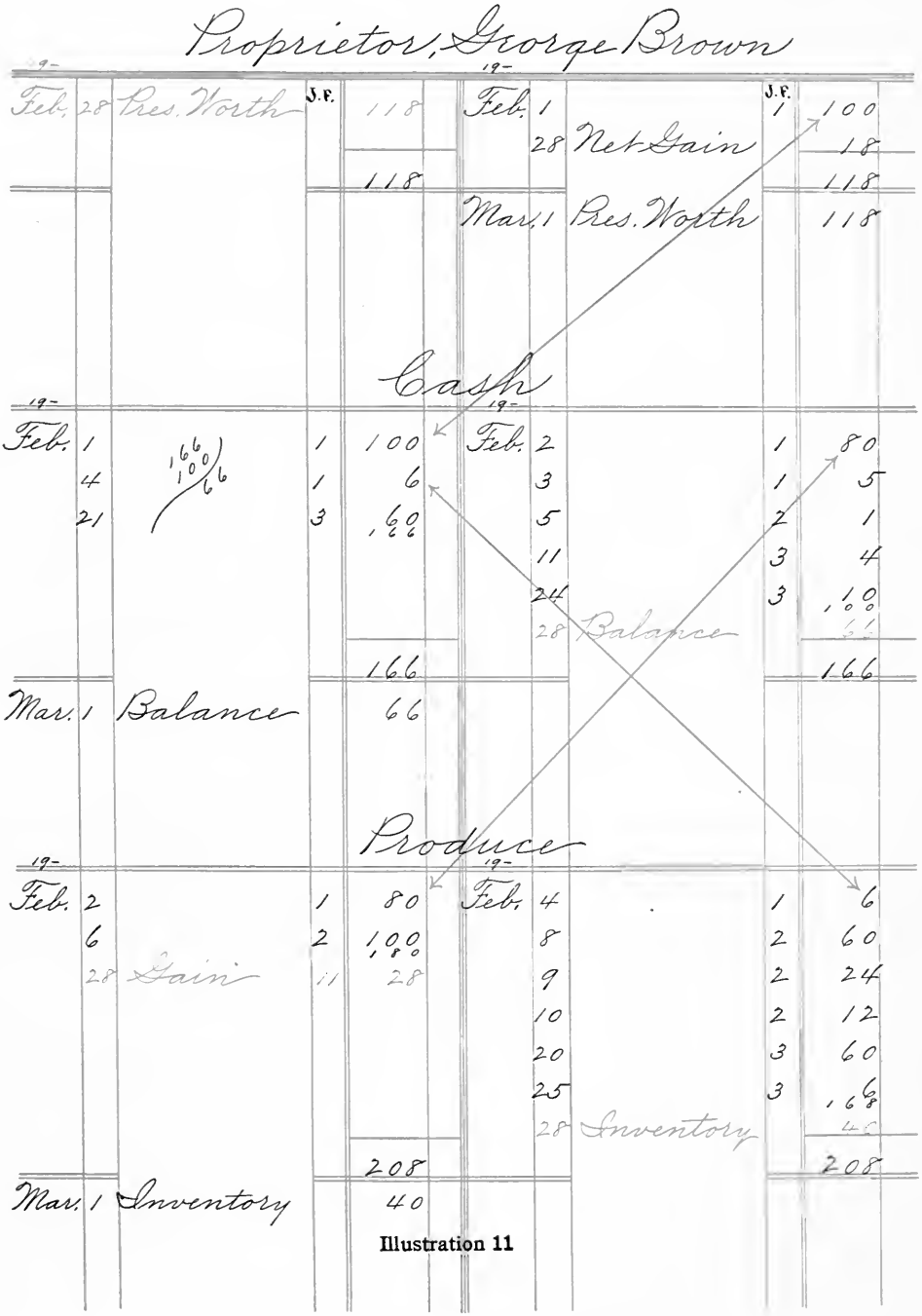


Illustration 11

Expense

19–					19–				
Feb.	3		1	5	Feb.	28	Inventory		10
	5		2	1		28	Loss		10
	11		3	4					
	2		1	10					
				20					20
Mar.	1	Inventory		10					

Julian Hotel

19–					19–				
Feb.	20		3	60					

George Armstrong

19–					19–				
					Feb.	6		2	100

John North

19–					19–				
Feb.	8		2	60	Feb.	21		3	60

Illustration 11

Richard Gilmore

19-								
Feb.	9		2	42				

George Lang

19-								
Feb.	10		2	12				
	25		3	6				

J. M. Nolan & Son

19-					19-			
Feb.	24		3	10	Feb.	2	1	10

Loss & Gain

19-					19-			
Feb.	28	Expense		10	Feb.	28	Produce	3	28
	28	Net Gain	1	18					
				28					28

Illustration 11

Statements Feb. 28, 19—

L.F.		Totals		Balances	
	Trial Balance				
1	Proprietor, Geo. Brown		100		100
2	Cash	166	100	66	
3	Produce	180	168	12	
4	Expense	20		20	
5	Julian Hotel	60		60	
6	George Armstrong		100		100
7	John North	60	60		
8	Richard Gilmore	24		24	
9	George Lang	18		18	
10	J. M. Nolan & Son	10	10		
		538	538	200	200
	Loss & Gain				
4	Expense			10	
3	Produce				28
	Net Gain			18	
				28	28
	Resources & Liabilities				
2	Cash			66	
3	Produce—Inventory			40	
4	Expense—Inventory			10	
5	Julian Hotel			60	
6	George Armstrong				100
8	Richard Gilmore			24	
9	George Lang			18	
	George Brown—Present Worth				118
				218	218

Illustration 12

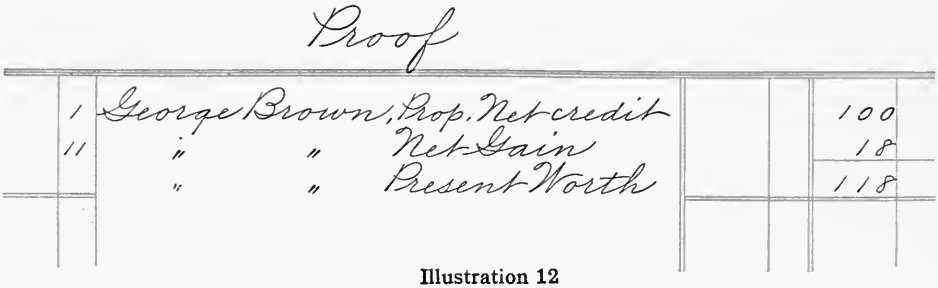


Illustration 12

LESSON 11

REVIEW QUESTIONS

On Lessons 9 and 10

41. What is meant by the term "merchandise"?
42. What is meant by the term "cash"?
43. What is meant by buying "on credit"? "On account"?
45. What is meant by an account?
46. What are the two general methods of keeping accounts? Define each.
47. Why is double entry superior to single entry?
48. Discuss why lessons 1, 2, and 3 deal with double entry.
49. State the theory of double entry.
50. What is the basis of all bookkeeping?
51. Define a ledger.
52. What is the meaning of the words "debit" and "credit"?
53. What does it mean to debit an impersonal account?
54. State the rule for debiting and crediting the proprietor.
54. State the rule for debiting and crediting property.
54. State the rule for debiting and crediting persons.
54. State the rule for debiting and crediting allowances.
55. Give the general law of debits and credits.
57. Why is it important to observe the correct form of entries?
58. Discuss the importance of complete entries.
59. What record book was used in this set?

LESSON 12

LIVE STOCK SET — JOURNALIZING

60. The object of this set is to familiarize the student with the principles laid down in the last two lessons, and also to introduce accounts with persons and expense. The same blanks will be used as in the model set.

61. Journalizing is deciding upon and arranging debits and credits in a convenient form for posting.

62. An *entry* is a record of a business transaction, with particulars and items, in the journal or some other book of *original entry*. This should not be confused with the *account*. See paragraph 45.

63. A simple journal entry is one in which there is only one debit and one credit, as

Cash	$ 50	
Mdse.		$ 50

64. A compound journal entry is one in which there is one debit and more than one credit; or one credit and more than one debit; or several debits and several credits, as

Mdse.	$ 50	
Cash		$ 25
Jones & Co.		$ 25
or,		
Cash	$ 100	
Henry Brown	$ 105	
Mdse.		$ 205
or		
Mdse.	$ 200	
Expense	$ 100	
Cash		$ 120
Bills Payable		$ 180

65. Errors in amounts which have not been included in totals, or which, if corrected, would not change other figures should be corrected by drawing a red line through the incorrect amount and substituting the correct amount. See

account at top of page 43. Whenever the correction would involve other changes, it should be made by means of a journal entry. Thus if Merchandise is charged for stationery which was used in the office, the proper entry would be Stationery to Mdse., crediting Mdse., for what was incorrectly debited to it. A full explanation should accompany each correction. *Never erase.*

Written Exercise

You will now journalize the following transactions in exactly the same manner as in the model set. Two pages of journal paper will be required. Remember that the debits are written at the left side (next to the red line) and the credits a little to the right (ending at the blue line). Place the first date (month, day, and year) at the top of the page, and the other dates (day only) in the center of the explanation column and leave a blank line after each entry. Study the principles involved in every entry. The total of each column is $963. When completed, hand in your work for approval.

February 1, 19—. Clarence Hogan has decided to invest his entire capital, $170, in two horses and two cows and begin the live stock business. He is advised to continue the same method of bookkeeping as was used in the last two lessons except that, owing to the greater number of transactions, he is advised to decide upon the debits and credits before posting. He writes the titles to be debited and credited, and the respective amounts, immediately below the memorandum. This art of deciding upon the debits and credits is called *journalizing.*

Debit Cash and credit Proprietor. See paragraph 54, principles 3 and 2. Use exactly the same form of journal as in illustration 10, page 38.

3. Bought of Edwin Brown a two-year-old colt, "Ned," for cash, $75.

5. Bought of W. E. Morrison a four-year-old horse "Prince" for $125, payable in 15 days.

8. Bought a three-year-old cow of Isaac Thompson for $40 cash.

9. Bought a four-year-old cow of E. B. Smith, payable in 20 days, $50.

12. Bought hay and feed for $15 cash. (Anticipating that we may have expenses which cannot be charged directly either to the Horses or the Cows, we open an account with Expense.)

14. Bought a halter for cash, $2. Debit Expense and credit Cash. Why?

15. Paid for stable hire, $1.00. Make the proper journal entry.

17. Sold both horses to Empire Livery Co. for cash, $250.

18. Sold both cows to E. L. Ford on account, payable in 30 days, for $110.
20. Paid W. E. Morrison for the horse bought Feb. 5 in cash, $125.

LESSON 13

LIVE STOCK SET — POSTING

66. Posting is transferring the debits and credits from books of original entry into the ledger, and properly classifying them.

67. Indicating the pages to which or from which posting is done, is very important, since it is often necessary to refer from one book to another. It is especially important in checking, as it saves the time wasted in hunting pages through an index. It also indicates at a glance whether or not the posting has been done. Note that there is to be a page or account number opposite *every debit* and *credit* in the journal, indicating where the amount is found in the ledger; and in the ledger folio column there is to be a journal page number opposite every amount, indicating from what page of the journal the amount was taken.

68. The ledger accounts frequently become very numerous and it is, therefore, important that the accounts be properly indexed. References are made either to the page or account number. Study the manner of indexing names in your telephone directory.

Written Exercise

You will now post the journal entries into the ledger. Three pages of ledger paper will be required. (1) Number the pages as usual. (2) At the top of page 1, on the blue line, write *Clarence Hogan;* 8 lines below, write *Cash;* and 12 lines below, *Horses.* Give one third page to each of the following accounts: Page 2, *Cows, Expense, W. E. Morrison;* page 3, *E. B. Smith, E. L. Ford and Loss and Gain.* (3) Post all the debits. Under *Cash,* on the *left* side, write

19—			
Feb.1		1	170

and mark the ledger page 1 opposite cash in the journal. Next under *Horses* write

19—			
Feb.1		1	75

and also mark the ledger page. Proceed in the same manner until all the debits are posted. Now add the amounts in the ledger and see if the total is $963, the same as in the journal.

(4) Proceed to post the credits in the same manner and test the totals. You have 22 amounts in the journal; you should have 22 ledger page numbers in the margin.

LESSON 14

LIVE STOCK SET — TRIAL BALANCE AND BALANCE SHEET

A. The Trial Balance.

69. The trial balance is a list of all open accounts with the total of the debits and credits of each placed opposite the name of each account; or the balance of each account may be found and placed in the left or right money column according as it is a debit or credit balance. In either case the two sides must be equal.

70. The trial balance proves only that the two sides of the ledger are equal. It does not show errors in posting that do not affect the equality of the debits and credits. For example, if we charged Jones and credited Stock with $100, when it should have been $125, or if we charged Brown instead of Smith, the trial balance would not show the error.

71. If the two sides of a trial balance are not equal, it is generally a waste of time to try short cuts to find the error. The best way usually is to check the work in the following order: (1) The totals of the trial balance; (2) the transfers from the ledger to the trial balance; (3) the totals in the ledger; and (4) the posting from the books of original entry into the ledger. Care should be taken actually to place a check mark (√) opposite each correct entry so as to avoid repetition or omission. Many bookkeepers check before taking a trial balance.

72. The proprietor's account shows, on the debit side, the withdrawals from the business, and losses, if any; on the credit side, the original investment, subsequent investments, and the net gain, if any. After the account is ruled, it shows, on the credit side, the present worth.

73. The debit side of the cash account is nearly always the larger.

74. Accounts with property usually show a balance, if any, on the debit side.

75. Expense account represents purchases of things, service, etc., necessary to carry on the business, and therefore will be debited for such expenditures. Occasionally expense items are sold, or for some reason an expense outlay is returned in whole or in part. In such cases the expense account is credited for the amounts expended.

76. Accounts with persons show a balance on the debit side, if they owe the business; on the credit side, if the business owes them.

Written Exercise A

(*A*) Total all the ledger columns having two or more entries, leaving light pencil totals, as shown in the model. Find the balance of each account. This may be done in pencil on the larger side of the account, as shown in the model. Do not erase the pencil figures, as they may be of assistance in detecting errors.

(*B*) On a sheet of scratch paper make a trial balance of your ledger.

W. E. Morrison's account is not included because both sides are equal. Follow as your model illustration 12, page 44. The totals of both sides should be $290.

(*C*) Having completed the rough balance, copy it on a page of journal paper.

B. The Balance Sheet.

77. The balance sheet is a condensed statement of the condition of a business at a given date and the results of operations for a given period. It should exhibit (1) A statement of the resources and liabilities; (2) an analysis of the losses and the gains; and, finally, (3) the present worth of the business.

78. The net worth of a business is the difference between the total resources and the total liabilities.

79. There are two ways of finding the present worth of a business: (1) by taking the difference between the resources and the liabilities; (2) by adding the net gain to the proprietor's net credit. If the two results are equal, the balance sheet is generally considered correct.

80. An account shows a resource if it represents property on hand or an amount due the business; a liability if it represents an amount owing by the business.

81. An account shows a loss if it has cost us more than it has produced; a gain if it has produced more than it has cost.

82. The cash account ordinarily shows a resource. It would show a liability only when an overdraft at the bank exceeds the money on hand.

83. In making a trial balance the cash book, if used, will be considered the cash account, and the balance will be obtained from this source instead of from the ledger.

84. An account with a person shows a resource when the debit side is larger than the credit side; a liability when the credit side is the larger.

Written Exercise B

(*A*) On a sheet of scratch paper write the heading *Resources and Liabilities, Feb. 28, 19—*; and on another *Losses and Gains, Feb. 28, 19—*.

(*B*) Take the trial balance and begin with the Cash account (Hogan's account, being the proprietor's, will be considered last). Since the balance $162 represents property on hand, it is a resource (34), hence you write it under the Resource and Liability heading. Next take the Horses account. Since you have no property left under the account and the credit side is the larger, it shows that the account represents a gain (35), hence you write it under the Loss and Gain heading. Thus you find that the Horses, Cows, and Expense accounts fall under Loss and Gain. Smith's and Ford's accounts fall under Resources and Liabilities. The net gain is $52. The present worth is Hogan's credit, $170 plus $52, or $222; and this, added to the credit side of the Resources and Liabilities account, makes the two sides equal, which proves the work. Reference figures of ledger pages or account numbers should be given in the statement opposite every account. See illustration 12, page 44. When you have checked your work and found it correct, you will copy it in ink on a page of journal paper.

LESSON 15

LIVE STOCK SET — CLOSING THE LEDGER

85. The object of closing the ledger is to balance the loss and gain accounts and to bring the final net gain or net loss into the proprietor's account, and thus clear the way for the entries for the next fiscal period.

86. By closing an account is meant canceling equal amounts on both sides and bringing down the balance, either below the ruling on the larger side of the same account or into a summary account, such as Loss and Gain. See the model.

87. Before closing the ledger, the following steps must always be completed, as shown in lessons 13 and 14.

1. The ledger must be completely posted and checked.
2. The trial balance must be taken off.
3. The balance sheet must be made.

These steps must be taken in the order indicated.

88. All the loss and gain accounts represented in the statement *must* be closed; the resource and liability accounts *may* be closed. The balance sheet serves as a guide in closing the ledger.

89. The significance of double ruling in the money column of a ledger account is that the amounts above the ruling on both sides of the account are equal, and that the account above the ruling is closed.

90. The significance of red-ink entries is that they are temporary and inserted only for the purpose of balancing. Unless the ledger is permanently closed, the red-ink entry will always be found either below the ruling or in some other account on the opposite side in black ink.

91. The proprietor's account is closed by crediting it with the net gain or debiting it with the net loss and bringing down the balance in one amount, under the credit side, as the present worth.

92. An account with a person having several items on both sides should be balanced, as shown in the model. No such account occurs in this set.

93. An account with a person having one item only should not be closed. Example, E. B. Smith in this lesson.

94. An account with a person having only one debit and one equal credit is closed by double red lines, as in the case of W. E. Morrison, this lesson.

95. If the business is owned by an individual, there is, of course, no adjustment of profits and losses necessary. There is simply the relation between the business in the abstract and the proprietor. The net profits of the business are credited to the proprietor, or the net loss is debited to him. This is fully illustrated in the model.

96. After closing the ledger, it is of the utmost importance that the balances below the rulings be checked with the statement of resources and liabilities. All the balances which appear under resources, *and no more,* must be under the ruling on the debit side; and all the balances which appear under liabilities, including the present worth, *and no more,* must be on the credit side. The sums of the two sides must be equal.

Written Exercise

(*A*) With the balance sheet and ledger before you, turn to the cash account. On the smaller, or credit, side write in red ink on the next line under the last entry, *Feb. 28, Balance 162.* Then rule the account *exactly* as shown in the model. Finally bring down the balance under the ruling on the *debit side,* writing in black ink, *March 1, Balance, 162.* Observe that this is merely

canceling $ 258 from *both sides* of the account, thus simplifying it for the next period and making it more convenient for reference.

Next turn to the Horses account. On the smaller, or debit, side write in red ink, *Feb. 28, Loss & Gain, 50.* The Cows account and the Expense account are closed in the same manner, except that Expense shows a loss.

(*B*) Now bring the gain from Horses and Cows into the credit side of the Loss and Gain, and the loss from Expense into the debit side of Loss and Gain. Balance the latter account by writing in red ink on the smaller, or credit, side *Feb. 28, Net Gain, 52.* Credit the Proprietor with the net gain. Write in black ink, as shown in the model.

(*C*) Rule Morrison's account, as directed in paragraph 94.

(*D*) Finally check all the balances below the ruling in the closed accounts, as directed in paragraph 96.

LESSON 16

REVIEW QUESTIONS

On Lessons 12, 13, 14, and 15

61. Define journalizing.
62. Define an entry.
63. Define and illustrate simple journal entry.
64. Define and illustrate compound journal entry.
65. How should errors be corrected?
66. Define posting.
67. Explain the method and importance of indicating pages from and to which entries are posted.
68. Why is it important to index the accounts properly?
69. What does the trial balance show?
70. What does it prove?
71. How should errors indicated in the trial balance be found?
72. What does the balance of the proprietor's account show?
73. On which side of the account must the cash balance occur?
74. What does the balance of a property account show?
75. Of an expense account?
76. Of accounts with persons?
77. What is a balance sheet and what does it show?

78. Define the net worth of a business.

79. In what two ways is the present worth found?

80. When does an account show a resource?

81. A loss?

82. What does the cash account show? When may it show a liability?

84. When does an account with a person show a resource? A liability?

85. What is the object of closing the ledger?

86. What is the meaning of closing an account?

87. What steps are necessary before the ledger can be closed?

88. What accounts must be closed? Which may be closed?

89. What is the significance of double ruling?

90. What is the significance of red-ink entries?

92–94. When and how should an account with persons be balanced?

95. Does the net gain or net loss of the business affect the proprietor's account?

96. Why must the balances below the ruling be checked with the statement of resources and liabilities after the ledger is closed?

LESSON 17

PRODUCE SET

This set is introduced for additional practice. The new feature in bookkeeping principles is the introduction of the produce and expense inventory.

A. Journalizing.

This is done in exactly the same form as in lesson 12. The only difference is in the titles of accounts. Four pages of journal paper will be required.

B. Posting.

You will need four pages of ledger paper. Number the pages. Place three accounts on each page, the last being Loss & Gain. Proceed exactly the same as in lesson 13. Do not forget the page numbers when posting.

March 1, 19—. (Your name) engages in the produce business, investing $100.

3 — Bought for cash, 100 potato sacks at 5¢.
3 — Bought for cash, 70 cwt. potatoes at $1 cwt.
5 — Sold to H. F. Bowman on account, 20 cwt. potatoes at $1.20.
5 — Paid for hauling potatoes, $1.
6 — Sold to J. T. Smith on account, 5 cwt. potatoes at $1.20.
6 — Bought of C. C. Galloway on account, 80 cwt. potatoes at $1.
7 — Sold to Arthur Brown on account, 10 cwt. potatoes at $1.20.
9 — Bought for cash, 10 cwt. potatoes at $1.
12 — Bought of W. S. Bridges on account, 15 cwt. potatoes at $1.
14 — Sold for cash, 5 cwt. potatoes at $1.20.
17 — Sold for cash, 15 cwt. potatoes at $1.20.
18 — Arthur Brown paid $12 in full of account.
21 — Bought of Joe Smith on account, 10 cwt. potatoes at $1.
26 — Sold to Hotel Julian, 100 cwt. potatoes at $1.10.
28 — Paid C. C. Galloway $80 in full of account.

Inventory: 50 potato sacks at 5¢; 16 cwt. potatoes at $1.

LESSON 18

PRODUCE SET — *Continued*

C. The Trial Balance.

Total the ledger accounts in pencil and proceed in the same manner as in lesson 14. Have your work checked by your teacher.

D. The Financial Statement, or Balance Sheet.

This is the same in form as in lesson 14, except that the inventory must be taken into account. Proceed as follows: On two slips of paper, headed, respectively, Resources and Liabilities, Losses and Gains, you will classify the accounts the same as in lesson 14. The Produce account shows a cost (debit) of $185 and a return (credit) of $176. You find that you have on hand $16 worth of potatoes. Add this to the credit and the result is $192; subtracting the cost will show the gain on produce $7. The $16 is placed under the Resources and the $7 under the Gains. Expense is debited with $6; but you find that $2.50 of this has not been used up, hence it should be deducted. The net loss under expense is, therefore, $3.50. The $2.50 is placed under the Resources and the $3.50 under Losses. Complete the statement, as shown in illustration 12, page 44.

LESSON 19

PRODUCE SET — *Continued*

E. Closing the Ledger.

The ledger is closed in the same manner as in lesson 15, except that the produce and expense inventories are entered on the credit side of their respective accounts in red ink before those accounts are closed.

LESSON 20

SPECIAL BALANCE SHEET NO. 1

From the following trial balance make a balance sheet:

Robert Ward — Prop.		$5720.
Merchandise	$338.80	
Expense	450.	
Cash	3509.21	
Henry Brown	926.39	
James Bristol	586.50	
Frank M. Howe	1205.25	
George W. Brown		686.15
C. W. Wilson		610.
	$7016.15	$7016.15

Mdse. inventory	$1536.10
Expense inventory	350.

LESSON 21

SPECIAL BALANCE SHEET NO. 2

From the following trial balance make a balance sheet:

(Your name) — Prop.			$4750.
Merchandise		$877.89	
Cash		2513.97	
Expense		238.90	
Mason Produce Co.		287.50	
Jones Grain Co.		2986.25	
H. H. Grayson & Son		287.50	
Henry Holmes			982.29
J. D. Anderson			1137.42
M. F. Wilson & Bro.			322.30
		$7192.01	$7192.01
Mdse. inventory	$1250.25		
Expense inventory	160.		

Supplementary Exercise

SPECIAL BALANCE SHEET NO. 3

From the following trial balance make a balance sheet:

William F. Morris — Prop.			$4033.80
Cash		$1631.14	
Merchandise		1496.93	
Expense		156.11	
Henry Ford		81.60	
C. M. Stanley		66.50	
A. L. Denson		126.10	
L. J. Ferris		592.12	
Geo. H. Putman		1165.	
H. J. Miller			145.01
John H. Moore			207.84
Roy O. Cook			336.06
B. W. VanWie			592.79
		$5315.50	$5315.50
Mdse. inventory	$2110.		
Expense inventory	80.		

LESSON 22

SPECIAL CLOSING EXERCISE NO. 1

Copy the following accounts on a ledger sheet, allowing one fourth of a page to each account, and close the ledger:

(YOUR NAME) — PROP.

DEBIT						CREDIT					
Jan. 10	J.	3	100		Jan. 1	J.	1	3000			
30	J.	6	50								

MERCHANDISE

DEBIT						CREDIT					
Jan. 1	J.	1	286	50	Jan. 1	J.	1	297	50		
3	J.	1	437	60	15	J.	3	386	40		
30	J.	6	542	80	30	J.	6	225			

EXPENSE

DEBIT					CREDIT				
Jan. 1	J.	1	100						
10	J.	3	50						
31	J.	6	150						

LOSS & GAIN

DEBIT					CREDIT				

Mdse. inventory $462.
Expense inventory $150.

NOTE. — Cash account has a balance of $2192 but is not included, as it does not need to be closed.

After closing the ledger, take a trial balance, using the cash balance given in the above note. This is called a proof trial balance, as it shows that all balances, etc., have been brought down below the ruling.

LESSON 23

SPECIAL CLOSING EXERCISE NO. 2

Copy the following accounts on a ledger sheet and close the ledger:

(YOUR NAME) — PROP.

DEBIT						CREDIT					
Jan. 10	J.	6	300			Jan. 1	J.	1	6000		

MERCHANDISE

DEBIT						CREDIT					
Jan. 1	J.	1	942	75		Jan. 2	J.	3	430	25	
2	J.	2	685	50		3	J.	3	520	35	
3	J.	2	1438	25		3	J.	4	225	70	
4	J.	2	1242			4	J.	4	1520	10	

EXPENSE

DEBIT						CREDIT					
Jan. 1	J.	1	120								
2	J.	2	50								

LOSS & GAIN

DEBIT						CREDIT					

Mdse. inventory $2320.

Expense inventory $70.

NOTE. — Cash account shows a debit balance of $3917.90.

Make a proof trial balance.

SUPPLEMENTARY EXERCISE

SPECIAL CLOSING EXERCISE NO. 3

Copy the following accounts on a ledger sheet and close the ledger:

(YOUR NAME) — PROP.

DEBIT						CREDIT					
Jan. 15	J.	16	1200			Jan. 1	J.	1	11000		

MERCHANDISE

DEBIT							CREDIT						
Jan.	1	J.	1	2890	20	Jan.	2	J.	2	1428	10
	3	J.	2	8420	50		3	J.	2	564	30
							4	J.	3	1356	10
							5	J.	8	1426	50

EXPENSE

DEBIT						CREDIT					
Jan.	1	J.	1	250							
	5	J.	6	560	10						

LOSS & GAIN

DEBIT						CREDIT					

Mdse. inventory $9286.
Expense inventory $560.

NOTE. — Cash account shows a debit balance of $2454.20.

Make a proof trial balance.

LESSON 24

SIX-COLUMN BALANCE SHEET

In the preparation of a financial statement, it is sometimes best to arrange the items in a tabular form, illustration 13, page 61. It has the advantage of being easily checked and of showing in a condensed form the essential facts of the financial condition of a business; but it is inconvenient for publication. Hence some bookkeepers use this only as a working sheet, and then arrange it into the statement form, if it is to be published.

WRITTEN EXERCISE

A. Rule a sheet of practice paper exactly like illustration 13, if ruled paper is not provided. Then prepare a six-column balance sheet from data given in lesson 20. Note that the inventories are either written in red ink or within parenthesis. Hand in your work for approval.

Six Column Balance Sheet

Folio	Accounts	Trial Balance Dr.	Trial Balance Cr.	Revenue Accounts Losses	Revenue Accounts Gains	Capital Accounts Resources	Capital Accounts Liabilities
2	Cash	2000				2000	
1	Proprietor		10000				
3	Mdse.	3000			1000	4000	
4	Expense	300		250		50	
5	Interest	100		150			50
6	Bills Receivable	700				700	
7	Real Estate	5000			500	5500	
8	Accts. Receivable	800				800	
9	Salaries	400		500			100
11	Bills Payable		900				900
12	Accts. Payable		1450				1450
10	Insurance	50		25		25	
		12350	12350	925	1500	13075	2500
	Proprietor's Net Gain			575			
				1500	1500		
	Proprietor's Net Credit		10000				
	" " Gain		575				
	" Present Worth						10575
						13075	13075

Illustration 13

B. In the same manner prepare similar balance sheets from data given in lesson 21. Hand in your work for approval.

LESSON 25

REVIEW QUESTIONS

On Lessons 19 to 24

Note. — Since the following questions are not answered in numbered paragraphs, the numbers at the left are not paragraph numbers.

1. Lesson 19 — What was done with the produce and expense inventories before closing the ledger?

2. Lesson 20–21 — Explain your balance sheets, giving the reasons for each step.

3. Lessons 22–23 — What is shown by the debit side of your own account? The credit side?

4. What is shown by the debit side of the merchandise account? The credit side?

5. What is shown by the debit side of the expense account? The credit side?

6. What is meant by "merchandise inventory — $462"?

7. What is meant by "expense inventory — $150"?

8. Why is not the cash account included in these exercises?

9. When the ledger is closed what does the proprietor's account show? The merchandise account? The expense account?

10. What is meant by a "proof trial balance"?

11. Describe the six-column balance sheet.

12. What advantage has this form of financial statement? What disadvantage has it?

LESSON 26

BILLS RECEIVABLE AND BILLS PAYABLE

97. A promissory note is a written unconditional promise to pay a certain sum of money to a certain person or his order at a specified time and place, properly signed by the party making the promise.

98. The party making the promise is called the maker. The one to whose order the money is to be paid is the payee.

99. Illustration:

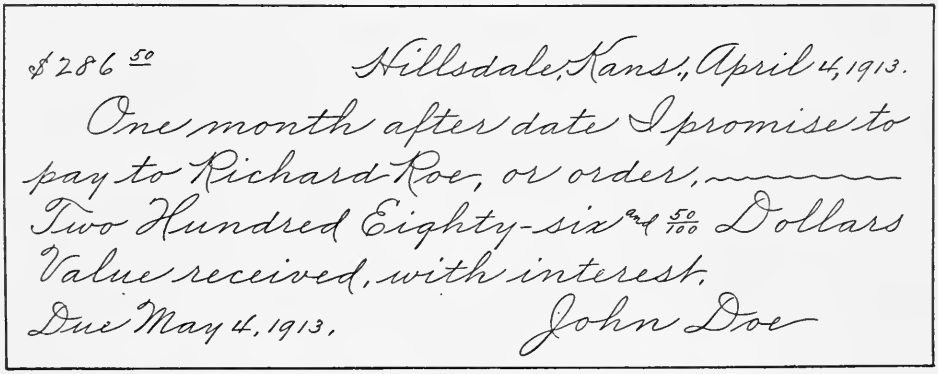

$286 50
Hillsdale, Kans., April 4, 1913.
One month after date I promise to
pay to Richard Roe, or order,
Two Hundred Eighty-six and 50/100 Dollars
Value received, with interest.
Due May 4, 1913.
John Doe

Illustration 14

In this note John Doe is the maker and Richard Roe is the payee.

100. When things are sold on credit, the buyer may give either his oral or written promise to pay for them at some future time. If the latter is given, it is usually in the form of the note shown above, and since it is property, it is entered in the records according to the rules already learned for journalizing property — debit that which comes into the business and credit that which goes out.

101. Notes in our favor we call "Bills Receivable." Those which we make in favor of others are called "Bills Payable."

102. At the time we receive a bill receivable we debit Bills Receivable account. When it becomes due and is paid by the maker, we credit Bills Receivable account, because we give it back to the maker and thus it goes out of the business.

103. When we give our note to another person, we credit Bills Payable. When we pay it at maturity, we receive it back and therefore debit Bills Payable.

Written Exercise

BILLS RECEIVABLE

The following transactions illustrate the Bills Receivable account. Using a journal and a ledger, journalize, post and make a trial balance.

Apr. 1 — (Your name) began business and invested notes signed by B. R. Skinner and E. H. Davis, $500 and $600.
2 — Received of W. H. Cobb on account his 2 months' note, $159.38.
3 — D. C. Duncan remits his note to balance his account, $237.45.
4 — B. R. Skinner pays his note in cash, $500.
5 — Received of A. J. Goss his note to apply on account, $376.50.
6 — E. H. Davis remits his check for his note, $600.
7 — Sent Telephone Company a check for $15 in payment of three months' service.
8 — Received of A. H. Jones his note in full of account, $300.
9 — Sold W. B. Weeks on his note, mdse., $194.30.
10 — Sold G. A. Marden on his note, mdse., $574.50.
11 — Gave W. H. Tucker on account W. H. Cobb's note, $159.38.
12 — Received note from G. A. Bruce on account, $200.
13 — Bought merchandise of W. R. Patten amounting to $792.58. Gave A. J. Goss' note in part payment, $376.50.
14 — Received cash for note signed by B. F. Jenness, $150.
15 — D. C. Duncan pays cash for his note of the 3d inst., $237.45.
16 — Received note at 30 days from E. Norton on account, $500.
17 — Received from W. H. Page 60 day note in full of account, $458.47.
18 — Loaned F. H. Morse cash on his 30 day note, $400.
19 — Received note from F. W. Perkins on account, $300.

LESSON 27

BILLS PAYABLE

Journalize and post the following transactions illustrating the Bills Payable account. Make a trial balance.

May 1 — Issued to G. H. Marsh my note to apply on account, $350.
2 — Bought mdse. of G. A. Bruce on my note, $362.85.
3 — Received from E. H. Davis to apply on account his note for $196.34.

May 4 — Paid by check my note in favor of J. L. Brewster, $525.
5 — Gave J. V. Chase my note for $257.43 to apply on account.
6 — Sold G. W. Tucker mdse. and received in payment my note made in favor of G. H. Marsh, $350.
7 — Gave H. H. Putney my 30 day note for rent of store, $150.
9 — Gave G. H. Tucker my 60 day note to apply on account, $150.
10 — Paid my note of the 5th by check, $257.43.
11 — Bought of G. W. Gate on my note, mdse., $775.
12 — Received of A. T. Howard to balance his account my note of the 3d made in favor of C. H. Bruce, $362.85.

LESSON 28

BILLS PAYABLE AND BILLS RECEIVABLE

Journalize, post, and make a trial balance.

June 1 — (Your name) began business and invested cash, $2000.
2 — Paid one month's rent to date, $75.
3 — Bought for cash, 100 bbl. flour at $5.75.
4 — Sold for cash, 15 bbl. flour at $6.15.
5 — Sold James H. Warren on account, 20 bbl. flour at $6.20.
6 — Drew for private use, $25.
7 — Bought of B. W. Scott on account, 50 bbl. flour at $5.70.
8 — Sold James Brown on his note at 60 days, 25 bbl. flour at $6.18.
9 — Bought of D. J. Wright on my note at 30 days, 50 bbl. flour at $5.65.
10 — Received cash from James Brown for his note, $154.50.
11 — Paid my note in favor D. J. Wright, $282.50.
12 — Sold to C. M. Johnson mdse. amounting to $840. Received in payment his note for $400 balance in cash.
13 — Paid by check, freight bill for month, $45.

Written Exercises

A. Assuming that James Brown lives in your city or village, write the note mentioned in lesson 28, transaction June 8.

a. Who is the maker?
b. Who is the payee?
c. When will the note be due?

NOTE. — When a note reads "two months after date," it will be due the corresponding day in the second month after it is made, or when there is no such day, the nearest one to it. Example: A note made Dec. 31, 1912, to run two months, will be due February 28th, as there is no 31st in February. If, however, the note had been made out for 60 days instead of 2 months, it would have been due March 1st, as actual days must then be counted.

B. Write the note mentioned in lesson 28, transaction June 9.

a. Who is the maker?

b. Who is the payee?

c. When will the note be due?

INTEREST AND DISCOUNT

C. Interest is the sum paid for the use of money. The legal rate of interest is that rate which can be collected on an interest bearing obligation when no rate is mentioned. All obligations in which interest is stipulated and all overdue obligations draw interest.

The maximun rate is the highest rate that can be lawfully contracted for.

A rate of interest higher than the maximum rate is called usury.

Discount is an allowance made for the prepayment of an obligation. It is computed the same as interest.

When we pay interest to others, interest is debited.

When we allow discount to others, discount is debited.

When interest is paid to us, it is credited.

When discount is allowed by others to us, it is credited.

Interest and discount applies only to allowances on notes and other commercial paper. Allowances on invoices are called Mdse. Discount, and are journalized the same as interest and discount.

Journalize, post, and make a trial balance.

Jan. 2. My interest bearing note of Dec. 2 for $200 in favor of A. H. Whitney is due to-day. Pay same in cash. (Debit Bills Payable, $200; debit Interest, $1; and credit Cash, $201.)

2. Received cash of J. D. Summers for his interest bearing note of Dec. 2, $300.

3. Gave Henry Richards my interest bearing note for three months, to apply on account, $680.

Jan. 4. Received a 30 day interest bearing note of Charles Bowen, $400, to pay for invoice of the 3d ult.

5. Received cash of H. H. Mason in full for note of $780 and interest from Dec. 8.

6. Paid my interest bearing note favor of Geo. A. Strong with interest at 5% for 60 days. Face of note, $460.

7. Discounted at Commercial Bank the note received from Charles Bowen on the 4th inst., receiving cash for the proceeds.

8. Prepaid my note favor of Henry Richards given the 3d inst. less discount to maturity.

9. On Dec. 1, I gave Henry Wilson a 90 day note with interest at 5% in full settlement of my account. At his request I pay same to-day less discount to maturity. Face of note, $920.

10. On Dec. 10, H. B. Stone gave me his 60 day note for $260 with interest. He pays same in cash to-day less discount to maturity.

LESSON 29

REVIEW QUESTIONS

LESSONS 26, 27, AND 28

97. What is a promissory note?

98. What are the principal parties to a note called? Explain the relation of each party to the note.

100. What use is made of notes in business? Is a note considered property?

101. Define Bills Receivable. Bills Payable.

102. Give the rule for journalizing Bills Receivable.

103. Give the rule for journalizing Bills Payable.

What is interest?

What is meant by legal rate?

What is the legal rate per cent in your own state?

What is meant by the term usury?

What is the penalty for charging usury in your state?

What are the rules for journalizing interest?

What is discount?

How is it distinguished from merchandise discount?

How are discount and merchandise discount journalized?

LESSON 30

BANKING

104. All business men deposit their money in the bank and pay bills by check. This does away with the necessity of handling large sums of money, making change, and is in every way much safer than using currency. When a debt is paid by check, the one who receives the check cannot cash it at the bank without writing his name on the back of the check, which is called indorsing it, and thus the canceled check becomes a receipt for the money paid when it is returned to the one who wrote it by the bank on which it was drawn.

Signature	Geo. W. Watson
Home Address	24 Warwick Ave.
Business Address	364 Main St.
Business	Retail Grocer
Introduced By	Henry Mason
Date	2/21/1915
Remarks	

Illustration 15

105. (*A*) The procedure necessary to open an account at the bank is simple. Select the bank you wish to deposit in, and if you have an acquaintance who is known at this bank, ask him to introduce you to the cashier. If you are known in the community, an introduction, though desirable, is not necessary unless the rules of the bank require it. The cashier will ask you to fill out a signature card similar to the above illustration 15. You must decide on the exact form of signature you will use and after writing it on the signature card do not use any other

form. Consult your teacher as to the best way to write your name. It is quite customary to use only the initials when there are two given names. The three initial letters should be joined, if possible, to facilitate the writing of your signature. Be sure the signature you adopt is distinctive and perfectly legible. Simplicity is best, as a simple signature is more legible and much less likely to be forged successfully.

DEPOSITED IN
FARMERS BANK
ROCHESTER, MINN.

BY George W. Watson

Feb. 21, 1913.

PLEASE LIST EACH CHECK SEPARATELY

	DOLLARS	CENTS
CURRENCY	280	
GOLD	50	
SILVER	10	50
CHECKS AS FOLLOWS:	200	
	150	
	65	
TOTAL	755	50
EXCHANGE		

SEE THAT ALL CHECKS ETC., ARE ENDORSED

Illustration 16

(*B*) Having entered your signature on the card provided by the bank for this purpose, you will next make out a deposit ticket similar to the one shown in illustration 16. Hand this ticket with your money to the cashier and he will enter the amount to your credit in a little book called the "pass book" or "bank book." This is your receipt for the deposit. Whenever you deposit money, this bank book should be presented to the one receiving the deposit, for entry.

(*C*) If you should forget your bank book, make out two deposit tickets; mark one "duplicate" and hand them to the cashier or teller with your deposit. He will stamp one of them in some way to indicate that the deposit has been received and you will keep this one as a receipt. The next time you bring your bank book to the bank hand this "duplicate" ticket to the cashier or teller and ask him to enter it in your book.

(*D*) After your deposit is entered, you will be given a blank check book containing checks for your use. The forms of the check and stub are shown in illustration 17. The form of check should be studied and practiced until you can write a check on blank paper. These checks are furnished for convenience, but the bank will pay a check made out on any kind of paper if it is properly written. Always use check blanks when possible, but if you have occasion to write a check where you can get no blank, tear off a piece of good quality paper about eight and one half inches long by three and one half inches wide and write the check, using the form you have learned.

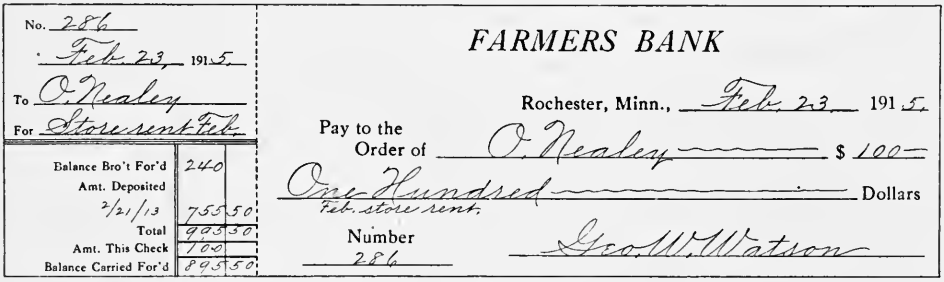


Illustration 17

(*E*) At your convenience deposit all money, checks, post-office money orders, bank drafts, etc., in the bank. Write your name on the back of each check, or draft, and on the face of each money order before making your deposit at the bank. By doing this you transfer your title to the instrument; guarantee that the instrument so indorsed is properly made out; that the signatures already on the instrument are genuine; that you are the rightful owner of the instrument; and that if it is not paid promptly when due by the one who is supposed to pay it, you will pay it yourself, provided the bank gives you prompt notice of its failure to receive it from the other party.

(*F*) Once each month, or once in two months if your checks are not numerous, leave the bank book at the bank to be "written up." The total amount drawn out will be deducted from the amount of the deposits and the balance to your credit in the bank will be indicated. You should compare this amount with the amount shown by the balance in your check book. All the checks you have drawn, and which have been paid by the bank, will be canceled and returned to you with your bank book. File them as receipts for the payments which they represent. To prove the stub of your

check book when you receive your bank book written up, deduct the total of outstanding checks from the balance as shown in the bank book, and the difference should equal the balance as shown on the check book stub.

106. It should be remembered that banks welcome small deposits as well as large ones. Your bank balance may be small, but the aggregate of small balances is large, and the bank is able to handle a large number of small accounts at a profit. Do not feel that you must wait until you have a large amount to deposit.

107. (*A*) There are many reasons why you should early establish a banking connection in addition to those mentioned above. Your financial standing in your own community will be improved by opening an account at a bank and paying by check. When you receive checks, money orders, etc., you will have no trouble getting them cashed, while if you are not known at any bank, you will need to be identified before any bank will cash them for you. Then, too, you will need to buy bank drafts to use in remitting money long distances, and if you have no bank account, the bank at which you buy a bank draft will charge you for it. The bank draft is illustrated and explained in lesson 34.

(*B*) It may become necessary to borrow money from time to time to use in your business. One of the functions of the bank is to loan money to customers at interest, for short periods of time, usually not over four months, on good security. This is in many ways the most important service rendered by a bank to a community.

108. All checks received by you should be deposited promptly, as you will lose the amount called for if you delay and the bank becomes bankrupt in the meantime. Checks should be deposited before the close of banking hours on the day following their receipt.

109. It is sometimes desirable to have the check show on the face of it that the money is on deposit in the bank to meet it. When this is the case, take the check to the bank and ask to have it certified. It will be stamped "certified," or "good" over the signature of the proper officer of the bank. From then on, the bank is obligated to pay it and nothing less than bankruptcy of the bank will keep the rightful holder of the check from getting his money.

110. Short-time notes received from debtors should be made payable at your bank, and then you can readily discount them to secure money for immediate use. This means that the bank will advance the amount called for in the note less the interest to the date of maturity. You will be required to indorse the note, as explained in section 105 (*E*).

Written Exercises

A. You have $10 in paper money; $3 in silver; $2 in small change; and a check for $7.50 from Henry Rogers. Rule a deposit ticket form and make out a ticket to deposit the above cash.

B. You have a $25 check from Morris Mason; a $5 gold piece; 4 half dollars; 3 quarters; and 30 pennies. Suppose you forgot to take your bank book to the bank. Proceed to make the deposit without it.

LESSON 31

REVIEW QUESTIONS

On Lesson 30

104. Mention the advantages of depositing your money in the bank and
107. (*A*) paying by check.
105. (*A*) Tell how to open a bank account.
105. (*A*) What have you learned about the use of a signature?
105. (*B*) What is a deposit ticket?
105. (*B*) What is the bank book and what is its purpose?
105. (*C*) If you forgot to take your bank book with you to the bank, how would you proceed?
105. (*D*) Is it absolutely necessary to use one of the blank checks furnished by the bank?
105. (*E*) What do you deposit in the bank?
105. (*E*) What is meant by indorsing checks, etc., before depositing them?
105. (*E*) What is the contract of the indorser?
105. (*F*) What is meant by "writing up" the bank book? How often should this be done?
105. (*F*) What will you do with canceled checks returned by the bank?
106. What is the attitude of the bank toward small depositors?
107. (*B*) What is one of the most important services rendered to a community by a bank?
108. When should all checks received be deposited? Why?
109. Explain what is meant by getting a check certified.
110. Where should short-time notes be made payable? Why?

LESSON 32

THE BUSINESS LETTER

111. In agricultural as well as in other lines of business it is necessary to write many letters, and since nothing more surely indicates the kind of business men we are than the letters we write, we should give some thought to this matter.

112. A simple letterhead should be used. This may consist of the name of the farm, the address, and the name of the proprietor. For example:

HILLHURST FARM
F. E. HOVEY, PROPRIETOR
Avon, N. Y.

When such a letterhead is used, it is not necessary to write the address of the proprietor as a part of the heading of the letter.

Other forms of simple letterheads are shown below.

Pleasant Grove Farm
J. C. HANSON, PROPRIETOR

FINE APPLES, PEACHES, AND OTHER FRUITS — GENERAL FARMING AND STOCKRAISING

ANDERSON'S ORCHARD HOME FARM
G. N. ANDERSON

TALENT, OREGON,_____19

MERRITT GREENE & SON
"EDGEWORTH"

HOLSTEIN CATTLE

PRODUCERS OF
HIGH GRADE WINTER WHEAT,
OATS, AND CORN.

"EDGEWORTH" FARM.
"LINN BROOK" FARM.
LINN BROOK DAIRY CO.

MARSHALLTOWN, IOWA.

MAPLE HILL FARM
J. C. FARQUHAR, PROPRIETOR
R. F. D. No. 1

MIDLAND FARM
M. J. Harper
R. F. D. No. 2
Farmers Phone 14x2
MILTON STANDISH

PHIL F. STANDISH
STANDISH BROTHERS
FRUIT RANCH
THREE AND ONE-HALF MILES
EAST OF ESTACADA

ESTACADA, OREGON, _____ 19

THE WALNUT HILL FARM
FAY F. DEAN

SHADOW BROOK FARM
R. H. WALLACE, Proprietor
HOOD RIVER, OREGON

AUG. PAASCH
FRUIT GROWER

113. Select a good quality of white paper, $8\frac{1}{2} \times 11$. Use the best writing fluid (not ink) and a medium pen. A blotter should always be kept at hand, and its use will materially improve the appearance of your letters. Many farmers find it desirable to use a typewriter. While speed cannot be acquired without much practice, it is possible to learn to write accurately and with a fair degree of speed in a very short time. Often the wife or daughter will do this part of the office work. Typewritten letters create a favorable impression, and as an advertisement, easily justify the necessary expenditure of money and time to make their use possible. If pen is used, the paper should be horizontally ruled below the heading. Some prefer to use plain paper, and a little practice will enable one to keep the lines straight.

114. The parts of a letter are (1) the heading, which consists of the address of the writer and the date; (2) the name and address of the one to whom the letter is written; (3) the salutation, consisting of "Dear Sir," "Gentlemen," or some other appropriate expression; (4) the body, which includes the text of the

HILLHURST FARM
F. E. HOVEY, PROPRIETOR
AVON, N. Y.

Oct. 31, 1913.

Mr. James Carson
Portland, Oregon.

Dear Sir:- The three barrels of "Ben Davis" apples shipped by you on the 15th inst. have just reached me in good condition.

Enclosed you will please find my check for $12 to cover cost of the apples and express charges as per your invoice.

I appreciate your promptness in filling my order.

Very truly yours,
F. E. Hovey.

Illustration 18

letter; (5) the complimentary closing, such as "Yours truly," etc.; and (6) the signature of the writer.

115. The above illustration is a proper form of a pen-written business letter having a two-line address.

116. The following will illustrate a correct form of typewritten letter showing a three-line address:

287 Main St.,
Corvallis, Ore., June 6, 1913.

Mr. Henry Thompson,
682 State St.,
Rochester, N. Y.

Dear Sir:

We are at a loss to know why you have ignored our several letters regarding the settlement of your account, which is long past due. Our treatment of you has not been such as to merit this apparent discourtesy on your part, and we dislike to believe it is intentional.

In accordance with our established custom, we shall place the account in the hands of our attorney for collection on June 20, unless we hear from you by that time with remittance or satisfactory explanation.

Yours truly,
H. C. Frey & Co.

117. Letters ordering goods should be written with great care to insure prompt and satisfactory attention. When ordering from a catalog, the exact names, numbers, etc., should always be used. Each item, where there are several, should be written on a separate line; shipping directions should be given; and usually the letter should contain some statement regarding payment. The following is a good form for such a letter:

R.F.D. 1,
Geneva, N. Y., June 1, 1913.

Geneva Hardware Co.,
Geneva, N. Y.

Gentlemen:

Send me the following items by parcel post and I will remit by check upon receipt of bill:

5 lb. No. 8 Wire Nails
1 Sargent Greenleaf Padlock, No. 5

Very truly yours,
Henry Holmes.

118. (*A*) When payments are made by mail, a brief letter should accompany the remittance unless the invoice being paid can be inclosed for receipt. When a letter is written, the amount, kind, and purpose of the remittance should be stated. A simple form of such a letter is shown in the following illustration:

R.F.D. 1,
Geneva, N. Y., June 3, 1913.

Geneva Hardware Co.,
Geneva, N. Y.

Gentlemen:

Inclosed find check on Citizens' Bank of Geneva for $1.25, the amount of your invoice of the 2d inst.

Yours truly,
Henry Holmes.

So far as possible all payments should be made by check. Since banks in distant places will charge a small amount for cashing your check, however, you should save your creditor this expense by making your remittance either by bank draft or post-office money order. The former will be issued by your bank without charge, while the latter will cost a small amount. Only when your post office is nearer your home than your bank would it be advised that you use the post-office money order. The bank draft will be illustrated and explained in lesson 34.

(*B*) Accurate postal information is printed for the benefit of all persons who are interested. Postmasters will furnish a pamphlet of general postal information without charge.

Written Exercises

A. Arrange a suitable letterhead for your father's farm.

B. Using paper $8\frac{1}{2} \times 11$, write a letter to Marshall Field & Co., Chicago, Ill., or any other firm, ordering five articles. Use their catalog, if possible, and follow directions regarding names of items, etc.

C. Your note mentioned in lesson 28, June 9th, and written in exercise *B*, lesson 29, is due. Write a letter to accompany your check on Third National College Bank of your place, which you will send in payment.

D. From postal information books which you may secure from your postmaster, ascertain the regular postage rates and the parcel-post rates to the principal cities of the country and to the principal places near your home.

Optional Exercise

Study the uses that can be made of the parcel post by you, either in buying from or selling to persons outside your immediate locality.

LESSON 33

REVIEW QUESTIONS

On Lesson 32

111. Why should we give special thought to our letters?

112. Of what should the letterhead consist? What is the advantage of using a letterhead?

113. What materials are desirable to use in the correspondence of a business?

114. What are the parts of a business letter?

115. 116. How should these parts be arranged on the letterhead?

117. What directions should be observed in writing letters ordering things?

118. (*A*) What directions should be observed in writing letters accompanying remittances?

118. (*B*) Where can you get accurate postal information?

LESSON 34

BUSINESS FORMS

119. Among the business forms with which every business man should be familiar are the following: Invoice, promissory note, check, bank draft, receipt, and simple contract.

120. (*A*) An *invoice* is an itemized list of goods sold, or services rendered, showing date, prices, terms, and amount. The following is an illustration of a simple form:

No. 256

AKRON, O., Feb. 25, 19 15.

M r. George W. Watson

Rochester, N. Y.

Bought of

GENERAL FARM IMPLEMENT COMPANY

TERMS 2/10, 30/n

792 COURT STREET

TELEPHONE—MAIN 1694

1	Deering Binder	150			
1	Corn Planter (Hand)	5			
				155	
	Less 2%			3	10
				151	90
	Received Payment 3/6/15				
	General Farm Implement Co.				
	per A. J. K.				
	Implements Acct. Check # 87				

Illustration 19

(*B*) Blank invoice pads can be secured at any stationery store. Names and place can be written in. It is not, therefore, necessary to have printed forms unless the number used would justify the additional expense. Sales slips like illustration 20, page 80, can also be purchased.

(*C*) These slips are made in duplicate, and by using a sheet of carbon paper under the original, a second copy can be made by one writing. The carbon copy

and original are separated by a perforated line. The original is sent to the purchaser and the copy is left in the book as the seller's memorandum of the sale from which proper book records can be made.

(*D*) When an invoice, or a sales slip, is returned with the remittance, it

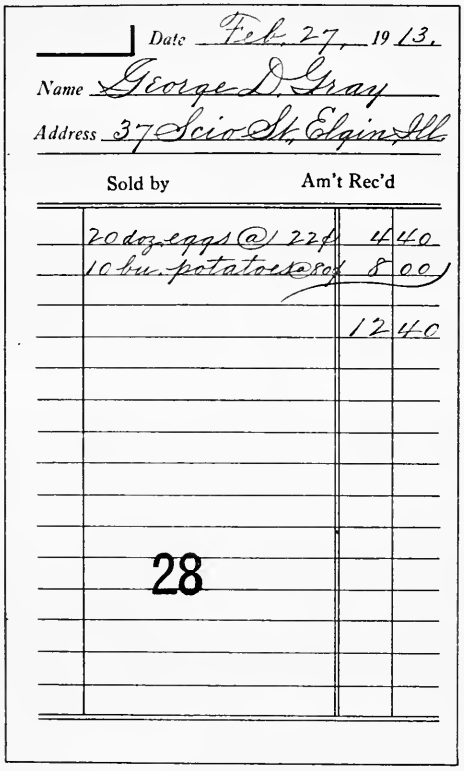


Illustration 20

should be marked "Paid," with date and signature, and sent back to the remitter as a receipt.

121. The *promissory note* is illustrated and discussed in lesson 26.

122. (*A*) A *check* is a written instrument in which a person or firm having money in a bank orders the bank to pay a certain sum to a certain person, or his order, or to the bearer. The most common form is shown in illustration 21a, on the next page.

FOURTH NATIONAL BANK

SAN JOSE, CALIF., March 2, 1915

PAY TO THE ORDER OF Richard Roe $ 200 00

Two Hundred 00/100 DOLLARS

No 653

John Doe.

Illustration 21a

(*B*) All checks received must be indorsed by the payee, as was stated in lesson 30, before they can be cashed at the bank. There are several kinds of indorsement, but two are of special importance. One is called a "blank" indorsement and the other a "full" indorsement. The following illustration will make plain the difference between these two kinds:

(BLANK INDORSEMENT) (a)

Richard Roe

(FULL INDORSEMENT) (b)

Pay to State Bank of
Clyde, or order
Richard Roe

Illustration 21b

Suppose John Doe, living in San Jose, Calif., owes Richard Roe of Clyde, N. D., $200. He writes the check shown as illustration 21a on the Fourth National Bank, in which he has deposited money, and sends it to Richard Roe, who, upon receiving it, writes his name on the back of it, as is shown above under blank indorsement, preparatory to cashing it at the State Bank of Clyde, with which he does his banking business. The effect of this blank indorsement is to make the check payable to bearer; that is, any one who gets possession of it.

It will be readily seen that this is not the safest way to indorse. If Richard Roe should lose the check, any person finding it could cash it at the bank, and Roe would lose the amount unless he could recover it from the dishonest finder who cashed it. If, however, Roe had indorsed as is shown under full indorsement, no one except the State Bank of Clyde, as indorsee, would be entitled to the check. No finder could cash it anywhere without first getting the signature of the State Bank of Clyde to whose order it was indorsed by Roe. This kind of an indorsement is called a "full" indorsement and is the safest one to use where there is any possibility of the check getting into the hands of a dishonest person not the rightful holder. Checks and notes made in the form illustrated are negotiable and may be passed on from one to another by indorsement and delivery, or by delivery only after being indorsed in blank. The contract of the indorser is stated in lesson 30 (105), and this contract is made by every regular indorser except one who writes "without recourse" over his indorsement, the effect of which is to relieve the indorser of that part of the contract which provides that he will pay the amount if the one who is supposed to do so does not.

(*C*) The rightful holder of any instrument who indorses it for the purpose of passing it on to another is called a "regular" indorser. An "irregular" indorser is one who is not a party to the original instrument, but who writes his name on the back of the instrument to guarantee that it is properly drawn; that there are no defects in it that will interfere with its collection; that all signatures on the instrument are genuine; that the parties to it are legally competent to contract; and that if it is not paid when due if properly presented by the legal holder, he, the indorser, will pay it if he receives prompt notice of its non-payment.

123. As was stated in a previous paragraph, before receiving the money on any check, the payee, or indorsee, must indorse it, and thus the check becomes a good receipt for the payment when it is returned by the bank to the one who drew it. To improve the check as a receipt, a brief statement as to what the check was given for should appear on its face under the amount in words and near the lower left-hand corner. If an invoice is being paid "Invoice of Apr. 1, '13" will be sufficient. Attach the canceled check to the invoice and file together. If a note is paid by check, "Note due Apr. 1, '13" would be sufficient. A check for groceries might have this memorandum: "Groceries, April, 1913." See illustration 17, page 70.

124. (*A*) All banks have money deposited in New York City banks or have connections with them through other banks, as New York is the money center

of the United States. Banks in the Middle West would also carry an account with a Chicago bank. There are many local banking centers in a country as large as ours. Since New York City is our greatest money center and the only one in which all banks in other cities have banking connections, it will be used in our study of the *bank draft.*

(*B*) Horace Stanford lives in Elmira, N. Y., and has money deposited in the Commercial Bank of that city. He desires to pay $100 to D. F. Ward of Portland, Ore. As the most convenient form of remittance in this case would be a New York bank draft, he goes to the Commercial Bank of Elmira and hands the proper clerk the following check:

COMMERCIAL BANK

ELMIRA, N. Y.

March 21, 1913.

Pay to the order of N. Y. Draft $100

One Hundred Dollars

Number 86 Horace Stanford.

Illustration 22

(*C*) A ticket like the following is filled out and handed to the clerk.

COMMERCIAL BANK

Mar. 21, 1913.

Horace Stanford

Requires the following New York Drafts

Payable to	*Amount*
Self	100

Illustration 23

(*D*) The following draft is made out by the clerk, signed by the cashier, and handed to Horace Stanford:

COMMERCIAL BANK

ELMIRA, N. Y.

March 21, 1913.

Pay to the Order of Horace Stanford $ 100

One Hundred Dollars

To Merchants Bank,
New York City

Jos. E. Baker
Cashier

Illustration 24a

(*E*) Since this draft is payable to Horace Stanford, or his order, he must indorse it before sending it to D. F. Ward. For reasons given in paragraph 122 (*B*), page 82, he indorses it in "full," as follows:

Pay to the order
of D. F. Ward
Horace Stanford

Illustration 24b

(*F*) The draft is now sent with a letter to D. F. Ward, Portland, Ore., who, when it is received, takes it to the Third National Bank of Portland, where he has

an account, and after indorsing it, receives cash or credit, as he may choose. Since Ward writes his indorsement at the bank, a "blank" indorsement will be satisfactory.

(*G*) The Third National Bank of Portland makes no charge for cashing the draft, because it also has money on deposit in some New York bank and draws drafts for its customers against its New York account. Every day it is necessary for the Third National to send money or its equivalent to its New York bank to maintain a balance in its favor to draw on, and it is much more convenient and safe to send claims on New York banks instead of money. Therefore, it is glad to cash all the New York drafts it can get, without charge. The draft cashed for Ward will be sent to the Chemical Bank of New York with which the Third National Bank of Portland has its New York account; the Chemical Bank will collect the amount from the Merchants Bank and credit the account of the Third National of Portland; the Merchants Bank will deduct the amount from the balance of the Commercial Bank of Elmira and send the canceled draft back to that bank to be kept on file.

(*H*) If Horace Stanford had not required that the draft be made out in his own favor so that he could indorse it to Ward, the canceled draft would not show that Stanford sent it to Ward, and thus it would be less valuable as a receipt. At any time Stanford may get the canceled draft from the Commercial Bank, if any question should arise as to whether or not the amount owed Ward had been paid.

125. (*A*) Blank *receipt* books can be purchased of any stationer at small cost. The proper form of a receipt is as follows:

SPOKANE, WASH., March 1, 1913.

RECEIVED OF Henry M. Coulter

One Hundred Eighty-seven 65/100 DOLLARS

In full of account to date

$ 187 65 Ohio State Creamery Co.
per E. C. Mills

Illustration 25

(*B*) While a receipt is not positive proof of payment, it is strong evidence and one should be demanded whenever debts are paid in currency. When checks are used, no receipts are necessary if the directions given in paragraph 123 are followed.

126. (*A*) A *contract* is an agreement between two or more competent persons to do or not to do some lawful thing for a consideration, or in writing under seal.

(*B*) No special formality is necessary except in a few cases which come under a law known as the statute of frauds, requiring that there must be written evidence in the following contracts:

1. Those in which one person agrees to be responsible for the debt or action of another.

2. Those in which an administrator or executor promises to be personally responsible for a debt of the estate he is settling.

3. Any contract made in consideration of marriage except mutual promises to marry.

4. Any contract for the sale of lands, or any interest in or concerning them.

5. Any contract which by its terms could not be carried out within the space of one year from the date of making.

6. Contracts for the sale of personal property, such as goods or merchandise above a certain value (from $30 to $200, according to the laws of the different states) unless some or all of the goods be delivered and accepted; or all or part of the purchase price be paid.

Practically all other contracts may be made orally, but since it is often difficult to prove an oral contract, the written one is recommended whenever possible.

(*C*) The following simple wording may be used in any ordinary contract:

Contract

This agreement made this first day of June, 1913, between H. R. Chase of Geneseo, N. Y., and George Strong of the same place, provides as follows:

That H. R. Chase agrees to work for George Strong one year, as farm manager, for a monthly salary of One Hundred Dollars; and that he will begin his term of service on June 15, 1913; and, further, that George Strong agrees to pay H. R. Chase the above salary for services as manager of his farm, and that said salary shall be payable semi-monthly on the 1st and 15th of each month.

H. R. Chase.
George Strong.

Such contracts should be made in duplicate, one copy being kept by each party. The practice of making a written and signed memorandum of each agreement entered into should be early established. It will save many dollars and much trouble and amply repay the little effort necessary to do the writing. Ink should be used when possible, but indelible pencil will answer quite as well and will often be more convenient.

Office Equipment

127. (*A*) It is not necessary that an elaborate office be maintained by a farmer, but there are a few conveniences that will go far toward making it possible to put the farm upon a business basis.

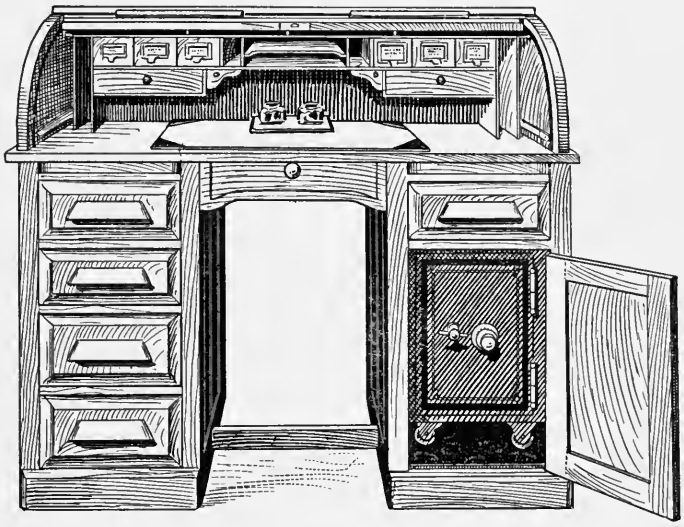


Illustration 26

(*B*) A desk, with drawer space, filing space, and safe combined is not very expensive and should be in the home of every up-to-date farmer.

(*C*) A simple box file like illustration 27 can be secured of any stationer. It contains alphabetical divisions and can be used for filing receipts, receipted bills, canceled checks, etc. A separate one should be provided for letters. Before a letter requiring a reply is filed, a memorandum of the reply should be made on the back. This should be brief. If the typewriter is used, a carbon copy can be made and attached to the letter for filing.

(*D*) A deep drawer in the desk, illustration 26, contains a complete outfit for filing all kinds of papers according to the most improved business methods and should be used instead of the box files, if such a desk is used.

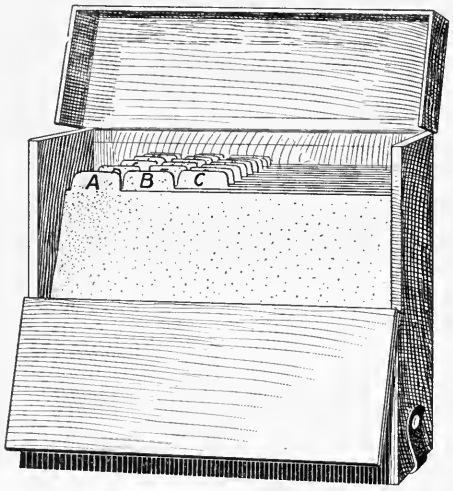


Illustration 27

Written Exercises

A. Write a proper form of invoice for your father's farm or other business.

B. Make out an invoice for four items of farm produce, sold by you, showing all the necessary information.

C. Suppose the invoice called for in *B* is paid to-day. Receipt it.

D. Make out the check used to pay the invoice called for in *B*. Supply the name of the bank.

E. You owe James Rollins $50 more than the amount of the check received above. You wish to pay the debt by transferring this check to James Rollins and by giving your own check for the balance. Take the necessary steps to make the payment.

F. You wish to pay $100 to Richard Roe, who lives in a city about 200 miles from your home. (Use any city.) A bank draft is preferable for such a remittance. Draw the check necessary to purchase one at College National Bank, where you have money on deposit.

G. Trace the bank draft until it is returned to the College National Bank of your place.

H. Henry Watson owes you $59.60 and he has paid you in currency. Write a receipt.

I. Your father's grocery bill at Brown & Co.'s grocery for the current month is $18.50. He asks you to write a check on College National Bank to pay this bill. Write one that will be a good receipt when canceled. Your father will sign the check after you have written it.

J. Your father has been asked to plant sweet corn for the Excelsior Canning Co. of your place on the following conditions: He is to plant 10 acres; care for it properly; harvest it; and draw it to the canning factory when required to do so by the factory. It is to be weighed at the factory and paid for in cash at the rate of $8 per ton. Draw up a suitable contract.

LESSON 35

REVIEW QUESTIONS

On Lesson 34

119. What business forms should every business man be familiar with?

120. (*A*) What is an invoice? (*B*) Is it necessary to have printed invoice blanks?

120. (*C*) What are sales slips and how are they used?

120. (*D*) What should be done with an invoice when it is returned with a remittance?

122. (*A*) What is a check?

122. (*B*) What must be done before checks received can be deposited?

122. (*B*) What is a "blank" indorsement? A "full" indorsement?

122. (*B*) What is the danger in the use of the blank indorsement?

122. (*B*) How may checks be passed on from one to another?

122. (*B*) What is the effect of writing "without recourse" over an indorsement?

122. (*C*) Distinguish between "regular" and "irregular" indorser.

123. What should be done to make the canceled check a good receipt?

124. (*A*) Why is a New York City bank used in the study of a bank draft?

124. (*D*) What is a bank draft?

124. (*H*) In whose favor should a New York draft be made out? Why?

124. (*H*) If at any time a dispute should arise about an amount paid by a bank draft, what can the one who sent it do?

125. (*A*) Are receipt blank books easily obtained?

125. (*B*) Is a receipt proof of payment? What is it? Should receipts always be insisted upon by one who is paying a debt?

126. (*A*) What is a contract?

126. (*B*) Is any special form of contract usually required? What contracts must have some written evidence?

126. (*C*) Why should contracts be made in duplicate? What may be used as a convenient substitute for pen and ink in making contracts?

FARM ACCOUNTS

FARM SET I

LESSON 36

INVENTORY

The father of George Enterprise, a mechanic in a small Middle Western town, was earning an average of fifty dollars a month at his trade. He was born and brought up on a farm of 160 acres, of which he inherited forty. He has now decided to take up intensive farming, specializing in pure-bred cattle, poultry, potatoes, strawberries, and blackberries.

He has an opportunity to buy the entire equipment of a neighbor who is retiring. His savings are such that after paying for the farm equipment and household goods, he has a balance of $125, including $20 due him from a neighbor. The local Farmers' Coöperative Credit Association holds a mortgage of $2000 against the property.

George, his sister Edith, and Mrs. Enterprise will care for the chickens and do a little work occasionally in the garden. For this the household will receive eggs, poultry, garden produce, and the dairy products from one cow. Whenever Mrs. Enterprise needs it, cash not to exceed $100 is to be paid to her for the services of herself and children.

Since Mr. Enterprise could return to town and resume his former occupation at $50 a month, he decides to draw $150 quarterly, and out of this he will pay the household as well as his personal expenses. Upon careful estimates, he decides to charge 60 per cent of the salary to crops, 20 per cent to live stock, 10 per cent to general expenses, and 10 per cent to general repairs.

The household accounts are kept by Edith on the form used in lesson 4, strictly separate from the business accounts.

Before beginning his first year's business, Mr. Enterprise prepares his first financial statement, which he enters in the day book with a suitable explanation as follows:

Financial Statement No. 1, Enterprise Farm[1]

April 1, 1911

RESOURCES:		
Real estate, 40 acres at $200		$8000.
Produce		
Potatoes, 35 bu. at 60¢.	$21.	
Hay, 10 T. at $7	70.	91.
Horses and cattle		
2 Horses at $100.	200.	
1 Mare	200.	
1 Colt over 1 year	125.	
1 Colt under 1 year	50.	
3 Cows at $100, over 2 years	300.	
3 Heifers over 1 year, at $75	225.	
2 Calves, under 1 year, at $40	80.	
1 Bull	50.	1230.
Poultry		
50 Plymouth Rocks at $1		50.
Implements		
Potato planter	52.	
Potato digger	67.	
Walking weeder	15.	
14-inch plow	14.	
2-section harrow	10.	
Wagon (old)	35.	
Delivery wagon	20.	
Road wagon (old)	40.	
Mower	45.	
2 Hay rakes	35.	
Manure spreader	100.	
Platform scales	16.	
Cultivator	17.	
Hand tools	8.	
Harness	26.	500.

[1] Part of this statement, as well as the plot, page 95, are from U. S. Farmers' Bulletin No. 325, entitled "Small Farms in the Middle West," by J. A. Warren.

Cash on hand and in bank	55.
Accounts and bills receivable	15.
LIABILITIES:	
Mortgage favor Farmers' Coöp. Credit Association, due October 1, 1919	$2000.

SUMMARY

Real estate	$8000.	
Crops	91.	
Horses and cattle	1230.	
Poultry	50.	
Implements	500.	
Cash	55.	
Accounts receivable	15.	
Total		9941.
Less liabilities		2000.
Net worth		$7941.

During the first year Mr. Enterprise kept only a day book, in which he recorded, not only his receipts and payments, but any data which would be of interest and value in the future.

At the end of the first year, March 31, 1912, he took another inventory.

WRITTEN EXERCISE

The student will now prepare the second financial statement in exactly the same form as the first from the data given below, and also prepare the statement of profit and loss, as outlined under paragraph 40. Two pages of journal paper will be required.

FINANCIAL STATEMENT NO. 2, ENTERPRISE FARM

APRIL 1, 1912

RESOURCES:

40 acres land @ $200; 40 bu. potatoes @ 60¢; 15 T. hay @ $7; 2 horses @ $100; 1 mare, $200; 1 colt, over 1 year, $150; 1 colt, $75; 3 cows, over 2 years, at $100; 3 heifers, over 1 year, @ $75; 3 calves, under 1 year, @ $40; 1 bull, $100; 60 Plymouth Rock chickens @ $1; potato planter, $50; potato digger, $63; walking weeder, $13; 14-inch plow, $13; 2-section harrow, $9; wagon (old), $30; delivery wagon, $18; road wagon (old), $36; mower, $40; 2 hay rakes, $25; manure spreader, $90; platform scales, $15; culti-

vator, $15; tools, $10; harness, $22; buggy, $100; cash and in bank, $105; accounts and bills receivable, $20.

LIABILITIES:

Mortgage favor Farmers' Coöperative Credit Association, due October 1, 1919, $1700.

SUMMARY

Real estate		
Crops		
Horses and cattle		
Poultry		
Implements		
Cash		
Accounts receivable		
Total		
Less liabilities		
Net worth		

You will notice that he revalued each article wherever a change occurred both as to reduction (depreciation) and increase (appreciation) of value. This subject is discussed fully in lessons 44 and 48.

The proprietor is now able to find the general result of the year's work, as follows:

STATEMENT OF PROFIT AND LOSS, YEAR ENDED MARCH 31, 1912

Net worth now		
Net worth last year		
Profit		
Less salary		
6 per cent interest on investment		
Net profit		

This kind of bookkeeping is better than none at all, but Mr. Enterprise now decides to install a complete but simple set of books, especially suited to the farming business. George has mastered this system in the public schools, and it is agreed that he will keep the books for $5 per month and 5 per cent of the net annual profits of the business. The $5 is to be paid out of the monthly wages of Mr. Enterprise, and the share in the profits is to be paid after the yearly financial statement has been made.

LESSON 37

THE FARM PLOT

Mr. Enterprise, being a progressive farmer, has decided on a definite scheme of rotation of crops for the purposes of maintaining the fertility of the soil; of

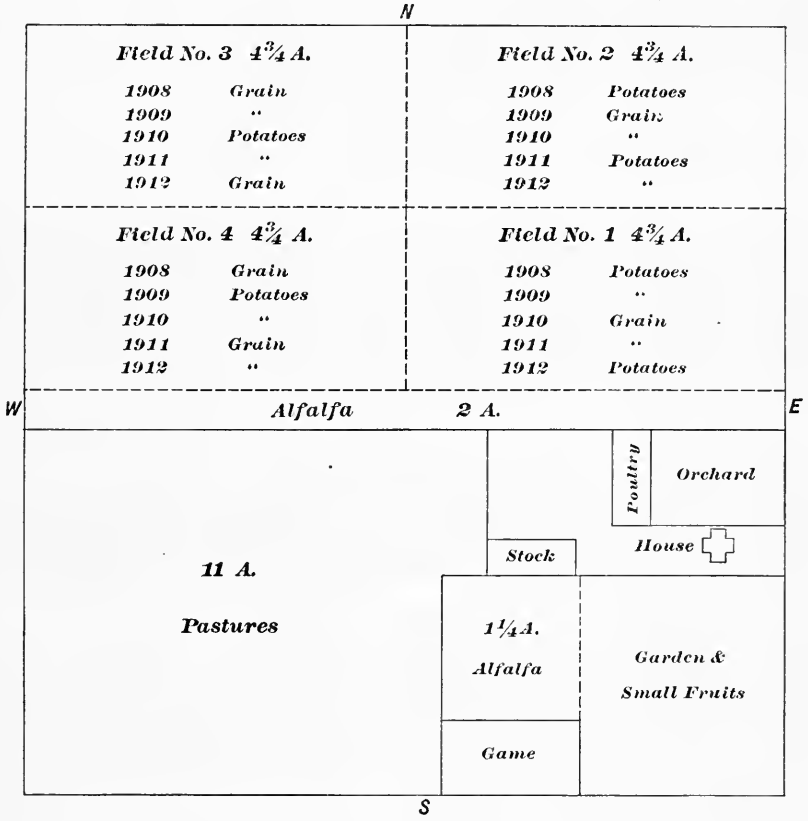


Illustration 28

securing the proper quantity and the right proportion of feed for his stock; of keeping the soil in good physical condition, thereby reducing labor; and of so arranging the crops that the labor will be as evenly distributed as possible throughout the growing season. In order to realize this he has kept a rough diagram of the farm, as shown in illustration 28. In order to keep the plots in per-

manent form, he now requests George to draw the plot to scale, four times the size of the figure in the book. Having done this, he can trace the outline with the aid of carbon paper and secure two or three copies at a time. (Typewriter carbon paper should be used to prevent blurring.) It is his intention to preserve these plots as permanent records of his farm operations. The reasons for another arrangement of the fields are interestingly explained in Farmers' Bulletin No. 325.

Written Exercise

Reproduce the figure, illustration 28, page 95, to four times its size. Each line in the figure will be exactly double in length. You will find that the figure is drawn to a scale of 1 inch = 1 chain = 330 feet. First outline the work in pencil, then trace it in ink. Practice lettering until you can very nearly reproduce the lettering in the figure. Hand in your work for approval.

The Continuous Annual Statement

In order to be able to compare the several items of the inventory from year to year, to guard against omissions and mistakes, and to save labor, Mr. Enterprise and George decide to arrange the two preceding statements in the continuous form and to allow a column for the inventory at the end of the present year.

Continuous Inventories

April 1

	No.	1911	No.	1912	No.	1913
Real Estate 40 A $200.00		8000		8000		8400
Produce						
Potatoes @ 60 ¢	35	21	40	24	25 @ 70	17 50
Hay @ 17.00	10	70	15	105	5 @ 8	40
Total		91		129		57 50
Horses & Cattle						
Horses	2	200	2	200		

Illustration 29a

Continuous Summary of Financial Statement

Jan. 1

	1911	1912
Resources:		
Real Estate		
Produce		
Live Stock		
Poultry		
Implements		
Supplies, Wood, etc.		
Accounts & Bills Receivable		
Cash and Bank		
Total		
Liabilities		
Mortgage		
Bills and Accounts Payable		
Hired Labor		
Total		
Net Worth		
Statement of Profit & Loss		
Net Worth 1912		
Net Worth 1911		
Net Income		
Less Interest on Investment 6%		
Less Family Labor $1000		
Net Profit		

Illustration 29b

Receipts — Cash

Sundries	Poultry	Horses & Cattle	Crops	Total	Date	Items
105				105	Apr. 1	Cash on hand and in bank
20				20		Accounts and bills receivable
		200		200		Sold 2 horses to P. O. Williams
					5	Paid J. K. Gill Co. Stationery 3.00, Desk 50.00
						" E. M. Turner for mare, "Fannie" 3 yrs old
					20	" Edw. Knowles for repair of implements

Illustration 30

1912–1913 **Book** **Payments**

Total	Crops	Horses & Cattle	Poultry	Real Estate	Implem'ts	Interest Insurance Taxes	General Expense	Repairs	Household	Personal	Sundries
53							3				50
200		200									
320								320			

Illustration 30

Written Exercise

Arrange the statements given as Financial Statement No. 1, and Financial Statement No. 2, in tabular form like illustrations 29 a and 29 b, on pages 96 and 97. Two pages of journal paper will be required. Rule an additional money column to the left, as shown in illustration 29 a.

Optional Exercises

A. It is suggested that the student prepare an inventory of his father's farm, or other business, and bring it to the class for discussion. Special credit will be given for the work.

B. On a form similar to the one used in lesson 36, prepare a statement of your father's farm for a convenient period. Ask your parents to help you.

C. Draw a plot of your home farm, if you live on a farm, and bring it to the class for discussion and credit.

LESSON 38

THE CASH BOOK

The student is already familiar with the special column cash book. The same form is used as in lessons 3 and 4 with different headings.

The several headings in illustration 30, pages 98 and 99, are self-explanatory. Under Crop Receipts are entered sales of everything produced from the soil; hides, hair, extra labor by the horses, as well as sale of animals are entered under Horses and Cattle; while under Poultry are entered the sales of eggs, fowls, feathers, etc. Under Crop Payments are entered everything which directly increases the cost of crops, such as seeds, fertilizers, labor, etc. The same is true of Horses and Cattle, and Poultry. Real Estate includes the land, buildings, fences, and all permanent improvements, but not *repairs* or *replacements;* under Implements are included all new machinery and tools not previously included in the inventory, but not *repairs* or *replacements;* parts of machinery are entered under Repairs; so are replacements of buckets, tools, etc., which were broken since the last inventory. The remaining columns need no explanation.

All payments are made by check, the first number being 50. Ordinarily the bank book is balanced at the end of each month, but in this exercise it will be proved only twice during the year.

CASH BOOK, 1912–1913

April 1 — Cash and in bank, $105; accounts and bills receivable (Sundries), $20; sold 2 horses @ $100 each to P. O. Williams.
5 — Paid J. K. Gill Co., for stationery, $3; desk, $50; paid E. M. Turner for Mare "Fannie," 3-yr., $200.
20 — Paid Edw. Knowles for repair of implements, $3.20.
30 — Sold 19 settings of eggs during April @ $2.00; paid E. F. Russel for breaking colts, $15; paid Farmers' Coöp., chicken feed, $12.

May 2 — Paid E. B. Jones for spraying outfit, $25; forge and tools, $15.
9 — Sold calf, $25; garden truck, $18.
16 — Sold old wagon, $35; paid Dr. E. Hancock, veterinary service, $5; paid J. R. Smith & Co., for 1 road wagon, $60.
23 — Paid E. B. Brown, for labor in garden, $15; drew for private use, $10.
30 — Sold 36 settings of eggs during May @ $2.

June 2 — Sold 1500 lb. strawberries @ 5¢ to John Brown.
9 — Paid Farmers' Coöp. for 200 bu. corn for poultry @ 38¢ bu.
16 — Paid Farmers' Coöp. for 20 bu. wheat @ 75¢ for poultry; paid Breeden Implement Co., parts for mower, $5.40.
23 — Sold 1000 lb. strawberries @ 5¢ to E. Horning.
30 — Sold 12 settings of eggs during June @ $2; paid salary for April, May, and June, $150. For distribution of salary, see page 91.

July 5 — Sold 2-year colt to R. E. Evans, $150; sold 38 cockerels @ $1.50.
10 — Paid R. M. Jones for 2 calves @ $50; paid E. R. Travers for pasture, $20 (crops).
15 — Sold 1450 lb. blackberries @ 5¢.
25 — Paid Edward Fulton for painting and papering dwelling, $100; paid Steiner Brothers for horseshoeing, $5.

Aug. 4 — Sold 1 cow to Robert Johnson, $100; paid E. B. King for 1 heifer, $40; paid County Development League subscription, $10.

Sept. 19 — Sold 1500 bu. potatoes @ 65¢ to Farmers' Coöp.
30 — Salary for July, August, and September, $150.

The student will now total all the columns and prove in the usual manner. All cash, except the $20 owing and $20 in cash drawer, has been deposited. He will also prepare a cash statement like the following:

CASH STATEMENT, SEPTEMBER 30, 1912

RECEIPTS

Balance on hand April 1 (including Accts. Rec.)	
Crops	
Horses and cattle	
Poultry	
Implements	
Total	

PAYMENTS

Crops	
Horses and cattle	
Poultry	
Implements	
General expenses	
Repairs	
Personal (above salary)	
Office desk	
Total	
Balance (in drawer, $20; owing, $20; in bank, $20).	

George now checks up the bank pass book. He finds that all the canceled checks are returned except those in favor of E. Travers, Steiner Bros., and County Development League. The bank book balance is $956.90. Is this correct?

The pass book is proved as follows:

Our balance (Check book stub)	?
Check No. 65	?
Check No. 67	?
Check No. 68	?
Bank balance	$956.90

CASH BOOK — *Continued*

Oct. 1 — Paid on mortgage favor Farmers' Credit Assn., $400; paid interest on $1700 @ 5 per cent for 1 yr., $85.

1 — The $20 owing April 1 has been paid. (No entry is necessary as this amount was entered as cash April 1.)

15 — Paid Roy Rudolph and Geo. Andrews for picking potatoes, $40.

Oct. 25 — Sold 500 bu. potatoes @ 65¢.

Nov. 4 — Paid Chas. Heckert for remodeling dwelling, $400. (Real Estate, $300; Repairs, $100.)

10 — Drew for family service, $100. (The family has lived comfortably on the monthly salary and the produce. According to agreement, this amount is now drawn to apply on the payment of a piano purchased to-day for $300. Drew for personal expenses, $25.)

25 — Paid L. R. Steiner for repairing fences, $16.

Dec. 5 — Paid Farmers' Coöp., for 100 bu. corn @ 38¢ for poultry.

15 — Paid Farmers' Ins. Co. for insurance premium for 3 yr., $24.

26 — Paid H. K. Abraham for improvements on barn, $100.

29 — Sold 2 yearling calves to E. K. Bryson @ $80.

30 — Subscription to agricultural magazines, $2.45; salary for October, November, and December, $150.

Jan. 2 — Paid John Davis for 1 cow, $70.

11 — Paid A. K. Abraham for general repairs, $15.

25 — Sold 2 heifers to Roy McDonald @ $75.

Feb. 15 — Paid J. B. Kingdon for 20 lb. alfalfa seed @ 35¢; 10 lb. clover seed @ 45¢; 60 bu. seed potatoes @ $1.50.

28 — Sold 10 settings of eggs during February @ $1.50.

Mar. 3 — Paid County Treasurer for taxes for 1912, $45.

16 — Sold 2-yr. old colt to John Edwards, $150; sold 1 cow to E. G. Strahorn ($\frac{1}{2}$ in 30 days, balance in cash), $100.

30 — Sold 16 settings of eggs in March @ $1.50; membership dues State Breeders' Assn., $5 (Horses & Cattle); salary for January, February, and March, $150.

The student will now total all the columns and prove in the usual manner.

Remember that the $50 entered as cash Mar. 16 is still owing. The currency on hand is $5. All cash, except these two amounts, has been deposited in the bank. The bank book balance is $228.95.

Prove the bank book in the same manner as on Sept. 30. The outstanding checks are:

County Treasurer, and
Salary for January, February, and March.

Check the results with your instructor.

LESSON 39

THE FINANCIAL STATEMENT

The Annual Statement consists of three parts: (1) A Summary of Cash Receipts and Payments; (2) A Statement of Resources and Liabilities; and (3) An Analysis and Summary of the Profits and Losses.

Part (1) is taken directly from the columns in the cash book; part (2) is the inventories and other items making up the resources and liabilities; and part (3) is made up of parts (1) and (2) combined.

The statement is fully discussed in lessons 7 and 14.

Written Exercise

The student will now prepare the annual statement in the order indicated in the last paragraph.

(1) Cash Statement like form below.

(2) Resources and Liabilities. Insert the data given on page 105 in the third column, provided in the Continuous Inventories sheet. See illustrations 29 a and 29 b.

(3) The Analysis of Profits and Losses is prepared by filling out the form given on page 106.

Cash Statement, April 1, 1913

RECEIPTS

Balance on hand and owing April 1, 1912 ———
Crops ———
Horses and cattle ———
Poultry ———
Implements sold ———
Total

PAYMENTS

Crops ———
Horses and cattle ———
Poultry ———
Real estate (improvements) ———
Implements ———
Int., ins., and taxes ———

General expenses
Repairs
Household (above salary)
Personal (above salary)
Office desk
Bills payable
Balance on hand (currency, $——; bank, $——).
Accounts receivable
Total

Financial Statement No. 3, Enterprise Farm

April 1, 1913

RESOURCES:

40 acres land @ $210; 25 bu. potatoes @ 70¢; 5 T. hay @ $8; 2 mares @ $200; 1 colt over 1 yr. @ $150; 2 colts under 1 year @ $75; 5 cows over 2 years @ $80; 2 heifers @ $75; 4 calves under 1 year @ $35; bull, $100; 70 Plymouth Rock chickens @ $1; potato planter, $45; potato digger, $60; walking weeder, $11; 14-inch plow, $10; 2-section harrow, $8; wagon (old), $28; delivery wagon, $16; road wagon (new), $60; mower, $36; 2 hay rakes $23; manure spreader, $80; platform scales, $14; cultivator, $13; tools, $9; harness, $20; buggy, $90; spraying outfit, $25; forge and tools, $15; cash and bank, $38.95; accounts and bills receivable, $50.

LIABILITIES:

Mortgage favor Farmers' Coöp. Credit Assn., due October 1, 1919, $1300.

Summary

Real estate
Crops
Horses and cattle
Poultry
Implements
Office desk
Cash
Accounts receivable
Total resources
Less liabilities
Net worth

Analysis of Profits and Losses

CROPS	COST	RETURNS
Inventories 1912–1913		
Cash payments		
Cash receipts		
Profit		
HORSES AND CATTLE		
Inventories 1912–1913		
Payments		
Receipts		
Profit		
POULTRY		
Inventories 1912–1913		
Payments		
Receipts		
Profit		
IMPLEMENTS		
Inventories 1912–1913		
Payments		
Receipts		
Loss (depreciation)		

Summary of Profits and Losses

	LOSSES	PROFITS
Crops		
Horses and cattle		
Poultry		
Implements		
Int., ins., and taxes		
General expenses		
Repairs		
Household (above salary)		
Personal (above salary)		
Net profit		
Total		

Rate of profit = N. P. ÷ N. W. 1912 = - - .- - %

PROOF

Net worth as per inventory, 1913 _____
Net worth as per inventory, 1912 _____
Net profit _____

LESSON 40

FARM ACCOUNTS WITH PERSONS

Farming may be regarded as a strictly cash business. The sales are comparatively few and far between and the store accounts are usually settled at regular intervals. Exchanges of farm produce for merchandise should be regarded as cash transactions; the sale of produce for cash, and the purchase of merchandise for cash. This will insure the proper record in the cash book.

It is true, however, that every farmer will have a limited number of personal relations which require memorandum accounts. This is especially true of dairymen, truck, and fruit farmers, whose customers may prefer to run an account by the month or week. In such cases, it is often convenient to use tickets or coupons of even amounts of $1, $5, or $10, and sell them for cash at a small discount.

Many short account systems for petty personal accounts are now in use, all having for their object the elimination of useless work in this class of accounts. One is the use of counter books, which give a carbon copy with each original. One slip is given to the customer and the other is kept as a temporary account. Since settlement is generally made once a month, it is useless to bring these personal accounts into the general books. Where such accounts are numerous at the time of inventory, their sum is usually regarded as a part of the inventory. But where they are few, such as in farming, they may as well be entered at once as cash and the due bill kept as a part of the cash balance. If only part payment is made, make a memorandum on the bill. When paid in full, the bill is either given the customer properly receipted, or destroyed.

Where it is desired to keep a permanent record of accounts with persons, it is convenient to use an ordinary day book with journal ruling. The left column is used as the debit, and the right as the credit column, as shown in illustration 31, page 108. If such accounts are numerous, as in the retail fruit and dairy business, it is convenient to use a loose leaf book with journal ruling, provision having been made for giving a duplicate to the customer at the end of the month.

Stanley Murray

1912				Dr.		Cr.	
Aug	1	3 bu. apples	40¢	1	20		
	4	10 lb. honey	15¢	1	50		
	5	1 qt. cream			20		
	6	1 chicken			60		
	11	2 bu. onions	80¢	1	60		
	13	1 qt. cream			20		
	17	2 bu. peaches	60¢	1	20		
		1 chicken			55		
	22	2 lb. butter	30¢		60		
	27	3 doz. eggs	20¢		60		
	31	Cash					5
		Balance (Red Ink)				3	25
				8	25	8	25
Sept	1	Balance		3	25		

Illustration 31

It is wholly unnecessary to keep accounts with creditors. A bill should be required with each purchase and kept as memorandum until paid. Many merchants furnish each customer a pass book, which is a duplicate of their own account.

Where the entry in the cash book is not made at the time of the transaction, it is important to remember that it must be entered at the time the payment is made, crediting the proper enterprise in the usual manner.

Below are four simple exercises which illustrate accounts with persons.

Written Exercises

On two pages of journal paper write up the following accounts and show the balance due, following illustration 31.

Stanley Murray

August 1, 3 bu. apples @ 40¢; August 4, 10 lb. honey @ 15¢; August 5, 1 qt. cream, 20¢; August 6, 1 chicken, 60¢; August 11, 2 bu. onions @ 80¢; August 13, 1 qt. cream, 20¢; August 17, 2 bu. peaches @ 60¢, 1 chicken, 55¢; August 22, 2 lb. butter @ 30¢; August 27, 3 doz. eggs @ 20¢; August 31, credited by cash, $5. Balance due, (?).

Hyde Grocery Co.

August 2, 10 bu. potatoes @ 60¢; August 5, 8 lb. butter @ 30¢; August 8 10 chickens, 64#, @ 10¢; By groceries as per bill on file, $9.55; August 11, 30 lb. honey @ 15¢; August 15, 5 bu. onions @ 80¢; August 19, 10 lb. butter @ 30¢; August 23, 5 boxes apples @ 90¢; August 25, 10 chickens, 50#, @ 10¢; August 31, 6 lb. butter @ 30¢; by cash $20. Balance due (?).

Mrs. N. Brown

September 1, Balance, $2.95; 1 chicken, 50¢; September 2, 1 qt. cream, 20¢; September 4, 2 lb. honey @ 15¢; September 5, 3 doz. eggs @ 35¢; September 11, 1½ bu. potatoes @ 60¢; 3 lb. butter @ 30¢; September 15, 2 lb. honey @ 15¢; September 19, 1 chicken, 65¢; September 24, 2 doz. eggs @ 35¢; September 30, by cash, $8.45. Balance due (?).

George Kinney

The hired man, George Kinney, prefers to receive his pay as he needs it, and the proprietor is therefore keeping a memorandum account with him. Following is his account for the month of September:

September 1, Balance due on wages for August, $25; September 3, cash $10; September 5, paid bill at Klines, $7.30; September 10, Cash, $5; September 26, pony, $25, saddle, $6; September 27, cash $5; September 30, wages for September, $35; October 1, balance due him (?).

LESSON 41

EXERCISES IN FARM STATEMENTS

Under the same headings as in the previous statements classify the following memoranda and then copy them neatly on journal paper:

(*A*) FINANCIAL STATEMENT, JAN. 1, 1912

RESOURCES:

514 A. land @ $60, including buildings and permanent improvements; 400 bu. wheat @ 75¢; 500 bu. oats @ 45¢; 35 sk. vetch and oats @ $2.50; 20 bu. wheat @ 40¢; 40 T. loose hay @ $10; 10 bu. potatoes @ 90¢; 3 grade cows @ $60; 2 registered cows @ $200; 3 grade heifers @ $50; 2 registered heifers @ $100; 1 bull $50; 1 bull calf @ $25; 12 work horses @ $200; 2 two-year horses @ $150; 1 registered mare @ $500; 1 registered 2-year filly, $500; 1 registered 7 mo. filly, $150; 3 brood sows @ $20; 75 grade sheep @ $4; 40 registered sheep @ $10; 100 fowls @ $1; 10 geese @ $1.50; 7 ducks @ 75¢; 5 hives bees @ $2.50; gasoline engine, $145; spring wagon, $50; wagon, $50; surrey, $50; buggy, $25; binder, $90; hay rake, $15; mower, $30; drill, $50; section harrow, $30; gang plow, $50; disk gang plow, $40; walking plow, $5; garden cultivator, $5; cream separator, $40; 4 sets harness, $120; tools, $50; supplies, wood, posts, etc., $125; accounts and bills receivable, $103.20; cash and bank, $76.40.

LIABILITIES:

Mortgage favor Farmers' Coöp. Credit Association, 5 years @ 5 per cent, payable on or before Oct. 1, 1917, $7000; hired labor $125; due Farmers' Coöperative Exchange (on gasoline engine) $75.

(*B*) FINANCIAL STATEMENT, JAN. 1, 1913

RESOURCES:

514 A. land @ $60; improvements, $570; 300 bu. wheat @ 75¢; 1000 bu. oats @ 45¢; 30 sk. vetch and oats @ $2.50; 40 T. baled hay @ $9; 40 T. loose hay @ $7; 25 bu. potatoes @ 80¢; 3 grade cows @ $50; 3 registered cows @ $200; 1 grade heifer, $25; 1 registered heifer, $75; 1 bull, $75; 7 horses @ $250; 4 horses @ $100; 2 registered mares @ $500;

1 registered 1-year mare, $200; 5 8-month colts @ $75; 2 brood sows @ $15; 50 grade sheep @ $4; 50 registered sheep @ $10; 4 rams @ $15; 100 fowls @ $1; 12 geese @ $1.50; 12 ducks @ 75¢; 5 hives bees @ $2.50; gasoline engine, $130; wagon, $45; spring wagon, $45; surrey, $48; buggy, $20; binder, $81; hay rake, $13; mower, $27; drill, $40; 4-section harrow, $27; 1 gang-plow, $45; gang disk plow, $36; walking plow, $5; garden cultivator, $4; disk harrow, $50; manure spreader, $150; land roller, $55; potato planter, $62; cream separator, $36; harness, $200; tools, $55; supplies, wood, etc., $127; accounts and bills receivable, $78.80; cash and bank, $85.30.

LIABILITIES:

Mortgage favor Farmers' Coöp. Credit Association, payable on or before October 1, 1917, $3000; hired labor, $140; due Huston Hardware Company, $73.40.

(*C*) Prepare a continuous summary of (*A*) and (*B*). See illustration 29 b, page 97. Submit your work for approval.

LESSON 42

REVIEW QUESTIONS

On Farm Set I

Note. — As paragraphs in the Farm Set I are not numbered, question numbers do not refer to paragraphs.

1. Point out the advantages to the community of intensive farming.

2. What is meant by a Farmers' Coöperative Credit Association? (The school library should be provided with the U. S. Government Bulletins on this subject.)

3. Ask your parents' opinion of the division of the labor in the different enterprises.

4. Why should the household accounts be kept separate from the business accounts?

5. What implements do you think should be found on the Enterprise Farm to make it more efficient?

6. Compare the prices in the inventories with those prevailing in your locality and point out the differences.

7. Explain the method of finding the profit or loss.

8. What is meant by depreciation? By appreciation?

9. What advantage is there in giving George a percentage of the annual profits of the business for keeping the books? How much will he get in addition to his monthly salary?

10. What is the object of the continuous annual statement?

11. Explain the several headings in the farm cash book.

12. What is included under Real Estate? What under Repairs? What under Implements?

13. How was the bank pass book proved?

14. Of what three parts does the annual financial statement consist, and how is each found?

15. Discuss the two methods for keeping farm accounts with persons.

16. Why is it unnecessary to keep accounts with creditors?

17. What is the value of the farm plot?

18. Describe a method of duplicating it.

19. What is a convenient scale to use?

20. Write a paragraph showing the importance of keeping farm and personal accounts. (Suggestions will be found in the preface.)

21. How does the rate of profit in the financial statement compare with the interest rates in your locality?

22. Do you regard the compensation of Mr. Enterprise and members of the family as satisfactory?

23. Besides the wages, what advantages does this family enjoy which they did not have in the city?

FARM SET II

LESSON 43

Lessons 43 to 54 illustrate a complete system of accounts for a modern general farm and furnish additional drill in the principles already studied. It includes not only complete financial records on the double entry principle, but also a system of cost accounts by which the farmer is able at any time to ascertain whether the business as a whole, or any branch of it, is paying or losing. The narrative is based on the operation of an up-to-date farm, but a number of transactions have been introduced for the purpose of illustration, which would, perhaps, not occur yearly. No records have been introduced which have not been tested and approved by a large number of successful farmers.

The books and forms used are: (1) The continuous inventory, (2) The special-column cash book, which serves both as cash book and general ledger, (3) the labor reports, (4) the feed record (or sheets), (5) cost accounts, (6) cost summaries, and (7) statements.

The partnership has been introduced because under this arrangement it becomes more natural to eliminate the household when considering the purely business end of the enterprise. It will also afford an opportunity for the student to study the laws of this important subject.

The dates for the various operations recorded in the cost accounts have been omitted, partly to save space and partly to give the students in different sections of the country an apportunity to do original work.

It is, of course, impossible to give an exercise in which the crops and practices will be wholly familiar to the students or even to the teacher. This is rather an advantage than otherwise since it will often lead to inquiries which will be of value to the student. Regardless of these differences in details, the bookkeeping principles are the same everywhere.

It is the experience of many who are using the system outlined in the following exercise that if systematically carried out, it will not take the average farmer more than ten minutes per day to keep it up. But as in everything else worth while, success can be attained only by determined efforts and study.

THE PARTNERSHIP AGREEMENT

Mr. H. M. Phillips owns a farm of 308 acres consisting of 246 acres of cultivated land, 50 acres of timber pasture, $1\frac{3}{4}$ acres of orchard and garden, $1\frac{1}{4}$ acres of yard, and 9 acres of roads and waste, as outlined in the diagram, lesson 45. While the farm has been a successful one, he has come to the conclusion that better results can be obtained by taking in (student) as a partner and investing additional capital to improve the equipment. It is the plan to develop a model Dairy and Hog farm and to feed nearly all the crops, thus returning the fertility to the soil in the form of manure.

The partnership agreement is as follows: Student buys half interest in the business at a valuation to be placed upon the property by three impartial appraisers. Each partner is to receive a salary of $50 a month for personal services, and at the end of the year the profits and losses are to be shared equally. Mr. Phillips's family is to occupy the dwelling, and student is to have use and care of a room in lieu of rent. It is agreed that each is to pay Mrs. Phillips $15 per month for board, and in consideration of occasional services the household is to have poultry and farm produce without cost to Mrs. Phillips. A strict accounting, however, is to be kept of the products used by the family for the purpose of showing the year's results. The household and family business, however, are to be kept strictly separate, Mrs. Phillips keeping the household accounts for her own information, according to the plan outlined in lesson 4.

Mr. Phillips's specialty is farm crops, and student's is dairying. Student, who is also a skilled bookkeeper, will have charge of the business end of the firm. It is decided to install a modern system of both financial and cost accounts. All moneys received are to be deposited in the local bank, and all payments are to be made by check. The firm name is to be Phillips and (Your name), and the details of the partnership agreement are set forth in Articles of Copartnership, dated January 1, 1912.

Henry M. Johnson, who has been in the employ of Mr. Phillips for some time, has been engaged for the year at a salary of $50 per month, without board, for which he will pay Mrs. Phillips $15 per month.

The appraisers have handed in their report and the inventory is given below. Student settles privately for half of the net worth of the business, and each having signed the Articles of Copartnership, the year's partnership is begun.

LESSON 44

THE INVENTORY

Of all business records, it is safe to say that the annual inventory is the most important and indispensable, if the business man wishes to know his financial standing. It is even possible, though far from desirable, to get along without any other records, and if the farmer finds no time for further bookkeeping, this one thing he must do: Take stock of his belongings at the end of every year. The total profit and loss may be ascertained without any further bookkeeping by merely taking the difference between the inventory at the beginning and end of the year. Thus, if the inventory January 1 of any year were $5000 and on the same date the next year, with the same basis of valuation, and with due allowance for depreciation, the total is $5500, the net profit for the year is $500. The importance of proper books lies in being able to discover what enterprises are run at a profit and which ones, if any, at a loss. The inventory is often of great value in settling insurance claims, in probating estates, and in securing loans on satisfactory terms.

What should be included in the inventory? Everything of value on the farm from wagon grease to the automobile, providing it is used in the interest of the business. It should be noted that no household equipment should be included. Neither a washing machine nor a cook stove, though indispensable, are proper charges against the farm as a business enterprise. They would be equally necessary if the farm were sold and the proprietor moved to town. The case is different, however, with equipment kept for the farm hands in laborers' cottages and bunk houses. All such items should be included in the inventory. A mistake often made is that of charging the farm with extravagant buildings and equipment. The value of a comfortable dwelling, proportionate to the size of the farm, is all that should be charged. For instance, one often finds a dwelling worth $10,000 on a few acres and the owner enjoys an automobile and other luxuries. Of course, all of this cannot be charged to the farm. In addition to the inventory proper, it is customary to include miscellaneous items of property, including cash, notes, stocks, etc., and also a statement of the liabilities. The difference between the total resources and the total liabilities is the present worth, and the difference between the worth of the business at the beginning and at the end of the year is the net profit, providing the proprietor has been paid for his labor. Or, it may be regarded as the family income when no regular wages are paid except for hired labor.

The question of how the inventory should be taken is important because it has a direct bearing on its accuracy. Perhaps the best plan is to head sheets of paper with the respective classes of property; one for buildings, another for live stock, a third for implements, and so on. Having determined the headings, pass through all the buildings and yards, listing, pricing, and checking.

Having completed the rough draft and rechecked every item for accuracy, the slips are next arranged conveniently for copying in permanent form. Perhaps the most satisfactory form is the continuous arrangement shown in illustration 32, page 117. It saves time and insures accuracy, and it is also very convenient for reference. Stationers usually can supply a 6, 12, or 24 column book, which may be used for the inventories, for the cash book, and for any other record requiring distribution.

Whenever practicable, every business should be organized into departments for the purpose of placing responsibility and securing highest efficiency. The inventory should be taken by the head of each department and checked by another. In the exercises which follow Mr. Phillips has charge of the implements, student of the stock equipment, and Mr. Johnson of the feed and supplies.

The most convenient date for taking the inventory varies in different localities. January 1st seems to be the natural date for final reckoning of the year's work, but any other date may be set as the beginning of the fiscal year. Except for the pressure of spring work, April 1st would be convenient in most localities, because supplies and feed are then low, and less time will be consumed in weighing and measuring. January 1st has been adopted in the exercises which follow.

Written Exercise

The student will now prepare the inventory in the continuous form, see illustration 32, page 117, from the report handed in by the appraisers referred to in this lesson. Ordinary journal paper will be used. You will need five pages. The first will be just sufficient for Real Estate and Products, page 2 will be devoted to Stock, 3 and 4 to Implements, and 5 to Miscellaneous, Liabilities, and Summaries. Do not forward totals from one page to the next. Each division is totaled and brought into the summary. Head the second column 1913 in anticipation of inserting next year's inventory in that column, as shown in the illustration. Be sure to leave the remainder of page 2 for such new implements as will be purchased during the year.

Inventories Clover Leaf Dairy

January 1

	No. Items	1912	No. Items	1913
Real Estate - Land		24875		24875
Dwelling		2000		2000
Laborer's Cottage		500		500
Horse Barn		1000		1000
Dairy Barn		1500		1500
Hog House		200		200
Colony Houses	5	75	5	75
Sheep Shed		50		50
Machine & Tool Shed		200		200
Manure & Straw Shed		300		300
Silo No. 1		100		100
Silo No. 2 1912 $150				150
Other Improvements 1912 $481				481
Total Real Estate		30500		31431
Products	1912	1913		
Wheat	63 bu. @ $1	60 bu. @ $1		63 / 60
Oats	435 bu @ 45¢	406 bu @ 45¢		195.75 / 182.70
Barley	273 bu @ 50¢	222 bu @ 50¢		136.50 / 111
Vetch	17½ T. @ $10	22½ T. @ $10		175 / 225
Clover	11 T. @ $11	22 T. @ $11		121 / 242
Corn Ensilage - Estimated				73 / 189
Potatoes	250 bu @ 60¢	243 bu @ 60¢		150 / 145.80
Fruit and Vegetables				16 / 66
Artichokes				175
Kale				50
Wood and Posts				162 / 205
Total Products				1092.25 / 1651.50

Illustration 32

INVENTORY. CLOVER LEAF DAIRY, JANUARY 1, 1912

REAL ESTATE: 308 acres, at $100, including —			
Farm		$24875.	
Dwelling		2000.	
Laborer's cottage		500.	
Horse barn		1000.	
Dairy barn		1500.	
Hog house		200.	
5 Colony houses		75.	
Sheep shed		50.	
Machine and tool shed		200.	
Manure and straw shed		300.	
Silo No. 1		100.	
Total real estate			$30800.
PRODUCTS:			
Wheat, 63 bu. @ $1		$ 63.	
Oats, 435 bu. @ 45¢		195.75	
Barley, 273 bu. @ 50¢		136.50	
Vetch, 17½ T. @ $10		175.	
Clover, 11 T. @ $11		121.	
Corn ensilage (estimated)		73.	
Potatoes, 250 bu. @ 60¢		150.	
Fruit and vegetables		16.	
Wood and posts		162.	
Total products			$1092.25
HORSES:	No.		
Brood mares (above 5 yr.)	6	$1200.	
Driving horses, 3 yr.	2	250.	
Colts	4	500.	
Total horses			$1950.
HOGS:			
Boar	1	$ 35.	
Sows	10	200.	
Pigs	55	330.	
Total hogs			$565.

CATTLE:	No.			
Bull	1	$150.		
Cows, average @ $60	24	1440.		
Heifers, average @ $25	8	200.		
Calves, average @ $15	10	150.		
Total cattle			$1940.	
SHEEP:				
Graded Sheep, average @ $4	80		$320.	
POULTRY:				
Chickens, average @ 75¢	200	$150.		
Turkeys, average @ $2.50	5	12.50		
Ducks, average @ 85¢	5	4.25		
Geese, average @ $1.50	3	4.50		
Total poultry			$171.25	
Total live stock				$4946.25
IMPLEMENTS:				
Separator	1	$90.		
Babcock tester	1	8.		
Milk cans	30	30.		
Milk cart	1	20.		
Hose	150 ft.	8.		
Disk drill	1	55.		
Land plaster sower	1	10.		
Corn binder	1	100.		
Corn planter	1	40.		
Steel plow	1	8.		
Walking plow	1	8.		
Clod masher	1	3.		
Subsoiler	1	13.		
Disk cultivator	1	35.		
Riding plow	1	30.		
Mower	1	40.		
Hay rakes	3	36.		
Harrow	1	10.		
Corn sheller	1	8.		
Corn cultivator	1	25.		
Forward			$577.	

Brought forward	No.	$577.	
Harness	7	175.	
Hatching equipment and brooders		40.	
Poultry appliances		20.	
Scales	1	15.	
Buggy	1	60.	
Wire stretcher	1	4.	
Stump puller	1	160.	
Wagon	1	35.	
Wagon	1	80.	
Wheel barrows	2	4.	
Double trees, etc.		25.	
Grindstone	1	3.	
Farm bell	1	3.	
Buckets, tubs, etc.		10.	
Tools		25.	
Total implements			$1236.
MISCELLANEOUS:			
Supplies: nails, twine, oil, etc.		$25.	
Cash and cash items, including bank balance, notes, and due bills		250.80	
Total miscellaneous			$275.80
LIABILITIES:			
Mortgage favor State School Fund (6 per cent)		$8000.	
Interest due		120.	
Unpaid labor		45.	
Total liabilities			$8165.

SUMMARY

Real estate	$30,800.	
Products	1,092.25	
Live stock	4,946.25	
Implements	1,236.	
Miscellaneous	275.80	
Total resources	$38,350.30	
Total liabilities	8,165.	
Net worth		$30,185.30

LESSON 45

THE FARM PLOT

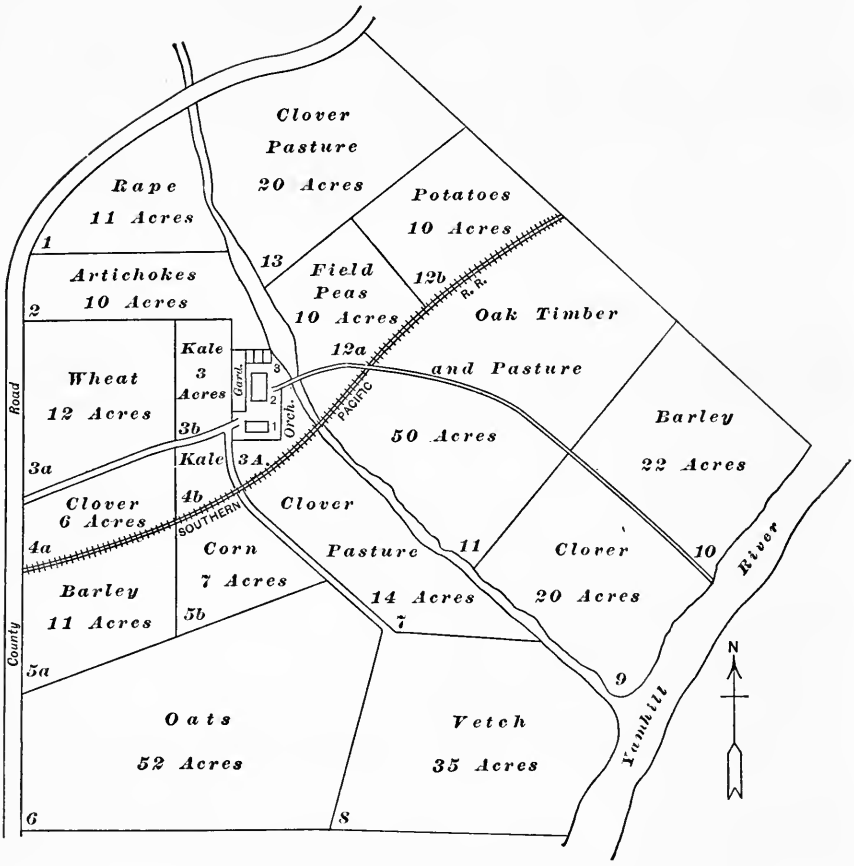
This farm is of very irregular shape, being bounded on the southeast by the river and on the northwest by the foothills. It is, therefore, very difficult to plot to scale. Nor is this necessary when the object is merely to preserve a record of the crop rotation. It is desirable, however, to take some pains with the first outline, since subsequent plots can be reproduced by tracing the first over carbon paper. Several copies can be obtained in this manner at the same time.

Written Exercise

Draw a rectangle, embracing the plot, illustration 33, page 122, in your textbook. Divide the sides of the rectangle into four equal parts, and join the opposite points by faint pencil lines. On a sheet of paper draw a rectangle with double the length of sides of the figure. Divide the sides into four equal parts and join the points. You are now able to reproduce the figure in the book very closely by noting the points where the field boundaries intersect with the field lines. It will give you a plot four times the size of the illustration. First mark the points and then join them with light pencil lines. When you find the figure satisfactory trace it in ink. Practice lettering on a separate sheet until your work is something like the illustration.

Note that the principal fields are numbered, and when the field is devoted to more than one crop, the patches are numbered 3*a*, 3*b*, etc.

As suggested on page 96, a convenient scale to use in plotting land is an inch to a certain number of chains, rods, or feet. It is not necessary to give rules in mensuration here. They are found in any good arithmetic. Here is a table, however, which will be useful in plotting your farm. One acre is equal to 10 rods by 16 rods, or 8 by 20, or 5 by 32, or 4 by 40; in fact, the length of two adjacent sides of the rectangle may be any two factors of 160 rods. It is often interesting to designate each crop by different colors. The diagram should be sufficiently large to give space on each plot for crop rotation, yield, and other data of interest.



14. [1] Orchard. [2] Dwelling and Yard. [3] Barns, etc.

Illustration 33

Optional Exercise

Prepare a diagram of your home farm, using the exact survey as shown on the abstract of title. You will find it exceptionally interesting to study the abstract and the several legal questions connected with it.

LESSON 46

THE CASH BOOK—LEDGER

Farming may be regarded as a cash business so far as bookkeeping is concerned. Since the year is the unit of bookkeeping, in the large majority of cases it is possible to "wind up" all petty accounts before the end of the fiscal year, and thus have all the business brought into the cash book.

Wherever possible, purchases should be made for cash or exchanged for farm products, which amounts to the same thing. If accounts are carried, the bills are settled monthly, or at other regular intervals. It is preferable to pay for definite items rather than so much on account. For instance, suppose a bill for items A, B, C, D, and E is due amounting to $25.40, and only $15 can be paid. It is found that A, B, and C amount to $13.20. It is preferable, so far as the farmer is concerned, to pay only for the three items rather than to pay $15 on account, since the several items may be chargeable to different accounts, and splitting an item often causes trouble in the bookkeeping. It is generally unnecessary to keep accounts with the dealers. The bills and some suitable memoranda are quite sufficient. All outstanding accounts should be paid at the end of the fiscal year so as to insure the proper charges. If this is not done, the outstanding bills may be classified in the same manner as the cash payments and charged to the several accounts. The total of the outstanding bills would be classed as Accounts Payable.

It is customary for wholesale houses to sell goods on time subject to certain terms. Thus, they often give 5 per cent off if the bill is paid within ten days, or perhaps 2 per cent, if paid in thirty days, and net if not paid within thirty days, up to sixty days. This is written, Terms: 5/10, 2/30, n/60. Business men generally have come to realize the importance of discounting bills, even if it requires occasional small loans at the bank. Merchants are usually willing to give a discount for cash far in excess of the interest charged at the bank for the same amount. For example, suppose it is desired to buy a piece of machinery in June which costs $50. The merchant will doubtless be willing to give at least 5 per cent off for cash, which amounts to $2.50. The interest for ninety days on $50 at 6 per cent is only 75¢, a saving on this item alone of $1.75 besides the improved credit. It is the dollar saved as well as the dollar earned that swells the annual profit and brings success instead of failure. Paid bills are filed away for reference, as suggested on page 126. The number of the check should be noted on the bill and also the distribution. See illustration 19, page 79.

Receipts, 1912

Date	Items	Total Dr.	Accounts Credited: Farm Crops	Orchard & Garden	Cattle & Dairy	Horses	Sheep & Hogs	Poultry	Sundries
1-1	Balance on hand	250 80							250 80
5	100 lb. chickens 15	15						15	
15	81500 lb. Potatoes .01	815	815						
	510 lb. Butter fat 35	178 50			178 50				
	E. R. Lawrence pd. interest	4							4
27	185 doz. Eggs 45	83 25						83 25	
	Balance 528.62	1346.55							
2-10	100 lb. Grease 20	20						20	
20	Deering Construction Co.								
	Team Labor 35 da @ 2.00	70				70			

Illustration 34

All receipts are deposited and all payments are made by check. Thus, when all the checks are paid by the bank, the bank book agrees with the cash book. Petty items are paid by the partners out of private money and they are reimbursed by check at convenient intervals.

It is very important that the cash be balanced at least once a month. This should be done when the bank returns the canceled checks. The form of noting the balance is shown in illustration 34. The bank pass book is proved by the cash book balance as follows: To the cash book balance add the outstanding checks; the sum is equal to the bank book balance.

If no regular vouchers are kept, all the items should be entered. If vouchers are kept when payments are made, only the name of the payee need be entered, or when cash sales are made, the number of the duplicate sales slip only need be entered. This method is shown in illustration 34.

If sales are made on time, it is understood that payment will be made before the end of the year, and a memorandum account should be kept, entering the payment when it is made.

The headings of the distribution columns in the cash book are for the most

Payments, 1912

Date	Payee	Ch. no.	Total Cr.	Accounts Debited: Crops	Live Stock	Labor	Implements	Improvements	Repairs	General Expense	Sundries
1-3	Ind. Tel. Co.	1	3 50							3 50	
	F. M. Johnson	2	45			45					
5	R. M. Wade & Co.	3	220 45				150		70 45		
8	H. M. Phillips	4	30							30	
15	E. K. Abraham	5	221					221			
24	J. R. Smith & Co.	6	145				145				
	Cow Testing Asso.	7	3		3						
31	H. M. Phillips	8	50			50					
	Student	9	50			50					
	F. M. Johnson	10	50 / 817 95			50					

Illustration 34

part self-explanatory. In practice they may be varied to suit the conditions of any farm. In the exercise, every cash sale, or other money received from the farm crops, is entered in the Farm Crops column. In the Farm Crops are included grain, hay, and potatoes, while under Orchard and Garden are entered fruits, vegetables, including onions. Since dairying is inseparably connected with the cattle, these two titles are united, and in this column are entered all sales of cattle and dairy products, including milk, cream, cheese, etc. Horses, Sheep and Hogs, and Poultry require no explanation. In the Sundries column are entered all items which cannot properly be placed in the other columns. On the payments side crops are debited in the Crops column with all purchases intended directly for the use of crops, including seed, fertilizers, boxes and packing, twine, threshing, etc. Under Live Stock are entered all direct charges against animals on the farm, including poultry. Fees in the Cow Testing Association, horseshoeing, veterinary services and the like are proper charges to Live Stock. All labor is entered in the Labor column even though it is known to be applied directly to any particular enterprise, since in the cost accounts labor is distributed at the uniform rate of 20 cents per hour. If practicable, labor may be apportioned at the time of paying the wages into the various enterprises. Under Implements is entered

all purchases of new machinery, tools, etc., but not when the article is intended to replace one that has been previously inventoried. Under Improvements are entered all outlays which add permanent value to the property, such as buildings, new fences, etc. Under Repairs are entered all payments which are made for the maintenance or upkeep of the property, such as nails, lumber, and other material bought for use in repairing. In the General Expense column are entered all outlays which cannot properly be charged against definite enterprises, but which are a loss to the business. In the Sundries column are entered all items which do not fall under the other columns.

It is generally preferable to forward the totals from page to page until the end of the year rather than to close each month and carry forward the balance only.

Because of the limited space and because some classes of transactions have very few entries, certain columns frequently contain more than one class of entries. For instance, in the receipts, all the farm crops are grouped together; also orchard and garden, and so on. If it is desired to classify them separately, it is only necessary to run through the columns and pick out the items under each heading. The total of the several headings, of course, equals the total of the column in which they are grouped.

One of the most satisfactory methods of filing vouchers is in envelopes properly numbered to correspond with the numbers of the checks, as follows:

Voucher Envelope	
Check No.	Payee
31	James Gray
32	Henry Smith
33	Charles Graham & Co
34	Excelsior Chain Co
35	Brown Bros. & Co
36	George Clayton
37	M. B. Vary
38	L. Blaster
39	Dayton Cash Register Co
40	W. B. Stetson

Illustration 35

A No. 10 Manila envelope is recommended. For convenience of reference each envelope contains 10 vouchers, beginning 1, 11, 21, 31, etc. The bills are filed as they are paid with the check number marked on each voucher,

and when the canceled checks are returned, they are attached to and filed with the corresponding bills. Index cards may be made as desired and kept either in the front or back of the envelopes.

It is now quite customary to note on the check briefly the items paid, or at least the date or number of the bill. This is usually done in the lower left-hand corner or immediately under the amount in writing. A check on which is provided a regular space for this purpose, and sometimes also for the distribution of the payments is called a voucher check. Such a check is usually regarded as a sufficient receipt. Any large business should provide itself with these checks.

No household expenses whatever are included in the cash payments. All private payments are made out of the monthly wages, and, if desired, each partner can keep his private accounts on a form similar to the one illustrated on pages 14 and 15. If it becomes necessary to advance more than the monthly wages to either partner, a separate check is written and the amount is extended in the Sundries, and not in the Labor, column.

Written Exercise

Below are the cash receipts and payments for the year. The student will enter them on the blank corresponding to illustration 34, pages 124 and 125. Note that the first few entries correspond with the illustration. The use of the columns is fully explained above. The work is to be balanced and proved each month.

January, 1912

RECEIPTS:

1. Balance on hand, $250.80 (Do not fail to enter in both the total and the sundries columns.)
5. Farmers' Coöperative Association
   100 # chickens @ 15¢
15. Benton Produce Co.
   81,500 # potatoes @ 1 ¢.
15. E. R. Lawrence paid interest $4
15. Coöperative Creamery
   510 # butter fat @ 35 ¢
27. Farmers' Coöperative Association
   185 doz. eggs @ 45 ¢

PAYMENTS:

2.	Check 1.	Independent Telephone Co.		
		Service for January, February, and March, $3.50.		
2.	2.	F. M. Johnson		
		Wages due for December	45.	
5.	3.	R. M. Wade & Co., Hardware		
		Fence wire	25.30	
		Lumber	42.	
		Nails	2.40	
		Bolts	.75	
		Manure spreader	150.	
		(All the supplies are for repairs. Hence Implements, $150; Repairs, $70.45.)		
8.	4.	H. M. Phillips		
		Attendance Farmers' Week at State College	$25.	
		(This trip was taken in the interest of the business to learn new methods. Hence it is charged to General Expense.)		
		Incidental expense items as follows:		
		Cash book	2.	
		Time books	.50	
		Journal for cost accts.	1.	
		Manila envelopes for voucher file	.50	
		Blank paper for special records	.25	
		Miscellaneous	.75	
		Stationery	5.	30.
		(These items were paid for by Mr. Phillips personally and he is now reimbursed out of the partnership funds. This practice enables the firm to pay *all* bills by check. His personal memorandum is filed with check number 4, the same as any other bill. In large establishments it is customary to advance a certain amount for petty cash items, but here this is unnecessary.)		

15.	5.	E. K. Abraham Improvements to dairy barn, as per contract and specifications		221.
24.	6.	J. R. Smith & Co. Gasoline engine		145.
24.	7.	Cow-Testing Association Quarterly dues (live stock.)		3.
31.	8–10.	Salaries, Phillips, Student, Johnson, each $50. (Salaries will be paid regularly every month.)		150.

February

RECEIPTS:

10. Farmers' Coöperative Association
100 # geese @ 20 ¢
20. Deering Construction Co.
35 days' team hire @ $2
21. Coöperative Creamery
540 # butter fat @ 35 ¢
21. Farmers' Coöperative Association
235 doz. eggs @ 40 ¢

PAYMENTS:

1. Check	11.	Dunn Bros. Lumber Co. Material for repairs to dwelling		$42.30
4.	12.	Corvallis Lumber Co. 4 M shingles @ $2.50 (For repair of dwelling roof.)		
10.	13.	R. H. Huston Fork handle	$ .30	
		Nails	2.40	
		3 Pitchforks @ 60 ¢	1.80	
		Part for mower	1.30	
		Wagon pole	6.	
		(Repairs and replacements.)		
25.	14.	Springer & Hunter, Plumbers, Installation of water system	260.	

28.	15–17.	Salaries	
28.	18.	Henkle Saddlery Co.	
		1 set harness	30.

You will now total all the columns. Add the totals of the distribution columns on the receipt side and see that the sum equals the total receipts. Do the same with the payments.

Then find the cash balance. Write the balance on the next line below the last entry on the receipt side, writing the balance in the items column, as shown on page 124.

March

RECEIPTS:

2. Farmers' Coöperative Association
   50 # chickens @ 15 ¢
11. J. R. Brown
   2 sheep @ $5
25. Farmers' Coöperative Association
   285 doz. eggs at 25 ¢
26. Farmer's Coöperative Creamery
   600 # butter fat @ 30 ¢
28. John Henderson
   1 colt, 20 months, $115

PAYMENTS:

1. Check 19.		Century Newspaper Agency	
		World's Work, Country Gentleman, Breeder's Gazette	5.
4.	20.	Edward Hunter	
		Repairing well	10.
30.	21.	H. M. Phillips	
		Attendance at State Breeder's Association	5.30
		Postage	1.
		Salary	50.
		(General Expense, $6.30, Salary, $50.)	

22–23. Salaries, Student and Johnson

24. Portland Seed Co.

Rye seed	12.25
Vetch seed	63.
Clover seed	31.20
Rape seed	2.55
Kale seed	3.
Seed peas	28.60
Seeds, plants, etc.	4.40
Seed corn	2.70

(Crops.)

April

RECEIPTS:

1. Henry Sullivan
   80 lambs @ $3
15. Robert C. Richards
   2 colts @ $130, two years old.
20. Stromberg Bros.
   8 heifers @ $25
30. Coöperative Creamery
   610 # butter fat @ 25 ¢
   Farmers' Coöperative Association
   260 doz. eggs @ 20 ¢

PAYMENTS:

1. Check 25. County Treasurer
   Taxes, 1912 — 205.
   (General Expense.)
1. 26. State Treasurer
   Int. on $8000 for 6 mo. @ 6 per cent
   (General Expense.)
1. 27. Independent Telephone Co.
   Service for April, May, and June — 3.50
5. 28. Tinker Bros.
   Horseshoeing — 5.
   (Charge to Live Stock since it is charged to horses in the cost accounts.)

16. 29. Hout & Whiteside
Halter 1.50
Pails .80
Milk cans 2.
(To replace broken ones.)

30. 30–32. Salaries
33. Hector M. Hollis
Breaking colts 90.
(Live Stock)
34. Dr. Horace Morell, Veterinarian,
Treatment of horses 15.
(Live Stock)
35. R. M. Wade & Co.
Potato Planter 62.
36. Cow Testing Association
Quarterly dues 3.

Find the cash balance. All cash has been deposited. The bank has returned the pass book and the canceled checks. All are returned except numbers 7, 17, and 20. It shows a balance of $651.95. Prove the correctness, as follows:

Our balance _____
Check 7 _____
17 _____
20 _____
Bank Balance _____

Is the balance correct? Place a check mark at the left of all the numbers except 7, 17, and 20. In practice the bank balance should be proved every month. The canceled checks are now filed either in numerical order or with the vouchers in their respective envelopes.

May

RECEIPTS:

3. Edward C. Green
4 calves @ $10
10. Edward Horner
Garden truck $12
20. John Winkle
10 M# hogs @ 7¢

26. Coöperative Creamery
590 # butter fat @ 25 ¢
30. Farmers' Coöperative Association
235 doz. eggs @ 20 ¢

PAYMENTS:

4.	Check 37.	E. K. Russell	
		Labor, repairing, tiling	10.20
16.	38.	E. H. Friedolf	
		Wages for General Assistance in Spring work	20.
16.	39.	Geo. Rudolf	
		Wages for general assistance	16.40
25.	40.	J. B. Pilkington	
		Land plaster	11.
		Spraying material	5.40
		Rose cuttings	.75
31.	41–43.	Salaries	
		(Add $1 to Phillips's check for stamps.)	
31.	44.	R. H. Huston	
		Lawn mower	12.
		Surrey	150.

June

RECEIPTS:

8. Kline Bros.
640 # Wool @ 20 ¢
20. Johnson & Hunter
Garden truck $ 20
21. Hotel Julian
500 # strawberries @ 5 ¢
26. Coöperative Creamery
500 # butter fat at 25 ¢
29. Farmers' Coöperative Association
210 doz. eggs @ 25 ¢

PAYMENTS:

1.	Check 45.	Benton County Growers' Association	
		Bonds	20.

5.	46.	Edward Holgate		
		Shearing 80 sheep @ 10 ¢		8.
24.	47.	J. R. Smith & Co.		
		Sheep shears	7.	
		Spraying outfit	10.	
24.	48.	R. H. Huston		
		1 Hay loader	90.	
		1 Hay rake	75.	
		1 Harpoon hay fork	2.	
		1 Hay sling	4.50	
		1 Unloader	15.	
30.	49–51.	Salaries		

The bank has returned the pass book. Checks 41, 45, and 46 are outstanding. What should be the bank balance?

LESSON 47

CASH BOOK—LEDGER, Continued

Prepare a cash statement for the first six months (see form, page 102) and submit it to your teacher for approval. Then complete the entries for the year.

JULY

RECEIPTS:

3. City Livery
   1 load clover hay $7.90
20. Edward Horning
   Garden truck $11
22. Hotel Julian
   Milk and cream $3
26. Coöperative Creamery
   450 # butter fat at 25 ¢
31. Farmers' Coöperative Association
   195 doz. eggs @ 25 ¢
31. City Stable
   1 load vetch $9.80

PAYMENTS:

1.	Check 52.	Independent Telephone Co.		
		Service for July, August, September		3.50
15.	53.	Fred Buchanan		
		Baling 15 T vetch @ $2		
		Baling 10 T. clover @ $2		
15.	54.	Cow-Testing Association		
		Quarterly dues		3.
16.	55.	Farmers' Coöperative Association (Crops.)		
		Twine	33.55	
		Paper	2.20	
26.	56.	R. M. Wade & Co.		
		McCormick binder		150.
31.	57-59.	Salaries		

AUGUST

RECEIPTS:

5. Johnson & Hunter
   Garden truck $11.20
19. Farmers' Coöperative Association
   100 # ducks @ 20 ¢
19. Benton Produce Co.
   63 T. vetch hay @ $10
20. Johnson & Hunter
   400 # blackberries @ 5 ¢
27. Coöperative Creamery
   500 # butter fat @ 30 ¢
30. Farmers' Coöperative Association
   160 doz. eggs @ 30 ¢
30. City Stable
   32 T. clover @ $11

PAYMENTS:

5. Check 60. Philip Bates, Threshing
   300 bu. wheat @ 6 ¢
   3120 bu. oats @ 4 ¢
   1155 bu. barley @ 5 ¢

16.	61.	Farmers' Coöperative Association		
		82 sacks @ 10 ¢		
		800 sacks @ 5 ¢ (seconds)		
31.	62.	H. M. Phillips		
		Expenses at State Fair	15.40	
		Salary		50.
31.	63–64.	Salaries, Student and Johnson		
31.	65.	E. H. Friedolf		
		General labor		23.40

September

RECEIPTS:

2. City School Board
   50 Cord wood @ $4
10. Farmers' Coöperative Association
   100 # ducks @ 20 ¢
18. E. K. Sharp
   2 sacks barley, $1.60
20. Hotel Julian
   Milk and cream, $2
27. Coöperative Creamery
   640 # butter fat @ 30 ¢
27. Farmers' Coöperative Association
   85 doz. eggs @ 35 ¢

PAYMENTS:

5.	Check 66.	Tinker Bros.		
		Horseshoeing		5.
25.	67.	Benton Lumber Co.		
		Boxes and crates (Crops)		28.70
27.	68.	Edward G. Dryer		
		Engine, rented for cutting silage	11.20	
		Gasoline, for same	3.50	
30.	69.	R. H. Huston		
		Seed cleaner	35.	
		Potato digger	126.	
30.	70–72.	Salaries		

OCTOBER

RECEIPTS

5. Winkle Elevator Co.
   2120 bu. oats @ 45 ¢
10. John Winkle
   150 M # hogs @ 7 ¢
16. Fisher Mills
   164 bu. wheat @ $1
20. Winkle Elevator Co.
   134 bu. barley @ 50 ¢
21. Farmers' Coöperative Association
   100 boxes apples @ $1
   44 boxes pears @ $1.20
25. Geo. Schneider
   4 calves @ $15
29. Coöperative Creamery
   650 # butter fat @ 30 ¢
30. Farmers' Coöperative Association
   45 doz. eggs @ 40 ¢

PAYMENTS:

2.	Check 73.	Cow-Testing Association Quarterly dues	3.
2.	74.	State Treasurer Int. on $8000 for 6 mo. @ 6 per cent	
2.	75.	Independent Telephone Co. Services for October, November, and December	3.50
31.	76–78.	Salaries	

NOVEMBER

RECEIPTS:

12. Farmers' Coöperative Association
   63 sacks onions @ $1.25
   160 # turkeys @ 20 ¢
26. Coöperative Creamery
   550 # butter fat @ 35 ¢
29. Farmers' Coöperative Association
   60 doz. eggs @ 45 ¢

PAYMENTS:

3.	Check 79.	R. M. Wade & Co.		
		Complete tool kit		$25.
6.	80.	J. K. Gill Co.		
		Account book	.50	
		Billheads	1.	
		Receipt book	.25	
		Letterheads	3.	
		Envelopes	1.50	
30.	81–83.	Salaries		

December

RECEIPTS:

2. Deering Construction Co.
   25 days' team labor @ $2
7. W. S. Brown
   108 posts @ 25 ¢
19. Farmers' Coöperative Association
   200 # turkeys @ 20 ¢
27. Coöperative Creamery
   500 # butter fat @ 35 ¢
30. Hotel Julian
   Milk and cream, $3.60
30. Farmers' Coöperative Association
   110 doz. eggs @ 50 ¢

PAYMENTS:

3.	Check 84.	State Treasurer	
		Payment of $4000 on mortgage and 2 mo. interest on $8000, $80. New mortgage payable on or before December 1, 1917	
5.	85.	Tinker Bros.	
		Horseshoeing	5.
16.	86.	Dr. Morell	
		Veterinary fees, tuberculosis test	7.

31.	87–89.	Salaries		
31.	90.	J. R. Smith Co.		
		Litter carrier installed	50.	
		Oil	.50	
		Gasoline	1.	
31.	91.	E. K. Abraham		
		For building silo No. 2		150.

LESSON 48

VALUATION AND DEPRECIATION

In connection with the annual inventory, two very important questions arise, namely: What value shall be placed on the property? and, What allowance shall be made for the natural "wear and tear"?

The actual value of any business depends ultimately on its earning capacity. If land can be relied upon to earn $6 an acre a year besides compensation for labor, depreciation, and risk, and 6 per cent is the current rate of interest, it is worth $100 an acre. However, this is not ordinarily a practicable way of arriving at land values, because few farmers know what profit their land returns per acre. When the farmers keep accurate records, this will probably be the most satisfactory basis for land valuation.

Sentiment is sometimes allowed to influence the valuation, since the homestead is worth more to the original settler than to any subsequent owner. This should not be encouraged. The taxable value, or any proportion based on it, is likely to prove unreliable because of the variety of tax rates even in adjoining counties. Perhaps the best valuation is a rather conservative estimate at what the land would bring if it were to be sold in the open market. This can usually be ascertained with fair accuracy, since there are in every community frequent sales of land situated similarly to the farm in question. Under any circumstances, it is preferable to undervalue rather than to overvalue.

Stock and farm produce should be valued at current market prices, while implements and tools should be valued at cost less due allowance for depreciation.

Depreciation may be defined as the decrease in value which property undergoes (1) through use, (2) becoming out of date, (3) being placed in a less favorable position than formerly, and (4) through abuse. Often a business becomes embarrassed because large profits have been declared while the plant has gone to ruin. Through neglect the equipment has become impaired and no fund has been set apart with which to replace it. To guard against this, the Interstate Commerce Commission now requires that all concerns under its jurisdiction shall set aside a certain percentage of their earnings for replacement of equipment. The farmer is, of course, less responsible to the public for failure to exercise prudence in this respect, but he is generally most successful who follows sound business practice in this matter.

Even with the best of care a mower will last only ten or fifteen years. If it lasts ten years, and costs $50 new, $5 is the annual loss due to depreciation.

If a house lasts 50 years, 2 per cent is lost each year. In each case the loss is as much an expense against the year's business as wages, insurance, or interest.

But depreciation is often the result of new inventions more than of actual wear. For instance, the man who had just purchased an old-style reaper about the time the self-binder appeared, lost nearly 100 per cent in one year because he *could not afford* to use the old implement in competition with the new. Fortunately, the farmer is less affected by depreciation due to property being out of style, though he is by no means free from it. This is most noticeable in harness, vehicles, and the like. If a railroad should pass through the farm in such a manner as seriously to interfere with farming operations, and if local markets should decline, or if there should be an unfavorable change in population or local institutions, the farm may depreciate in value. And, finally, a farm often depreciates in value by the abuse of the soil in continuous cropping, improper cultivation, lack of fertilization, and so on.

There are four practical methods of computing depreciation:

1. To list all property at proper prices and deduct a uniform rate of depreciation, according to the several classes of property.

2. To apply a uniform rate of depreciation on a continually decreasing valuation. For example, 10 per cent on $100 this year, 10 per cent on $90 next, 10 per cent on $81 next, and so on.

3. To revalue each article annually.

4. To charge all replacements to expense or repairs, and in this manner maintain the original valuation.

A combination of all four methods has been used in the exercises in this set. In the first place, real estate is not reduced to show the decrease in building values. The appreciation in the value of the land, due to improved methods of farming, together with good care and repairs, will more than offset the decrease in the value of the buildings.

It is found impracticable to fix a satisfactory rate of depreciation for the live stock, since some are increasing and others are decreasing in value. Hence, all the animals are revalued at each inventory. The live stock cost accounts are charged with 6 per cent on the valuation of the houses devoted to the different kinds of animals, together with a suitable depreciation for the implements used in that enterprise. For instance, the dairy equipment is "charged off" at the rate of 20 per cent, since it will probably have to be replaced within five years.

The case of implements is different. From a careful estimate of the "life" of the various implements it appears that an average of ten years will not be far wrong. That is, the total value of the implements at the beginning of 1912, $1236, will have to be replaced in ten years and hence $123.60 is "charged off" each year. This happens to be almost exactly 50¢ per acre of the cultivated land. Since every acre will probably receive about an equal use of the implements, the crops are charged with the depreciation at the rate of 50¢ per acre. Next year it will be $225, or 10 per cent on the total implements at the beginning of 1913. This will be about 65¢ per acre.

Depreciation is one of the most debated subjects in accounting literature. This is perfectly natural. Even with the same care, the same grade of machine or horse or house will rarely last the same length of time in two localities. This is due to climatic and other natural conditions "over which man has no control." Hence, there can be no such thing as standard rates of depreciation. Attempts have been made in this direction, but all have failed. Fortunately, however, the law of averages comes to our assistance. Where some implements are short lived, others last longer, and by taking a sufficiently long period and a sufficiently large number of articles, it is generally possible to arrive at a rate which answers for all practical purposes.

If it is desired to adopt a uniform rate of depreciation, the following table may serve as a guide:

Frame buildings	2 to 5 per cent.
Brick buildings	1 to 3 per cent.
Horses, above 5 years	10 per cent.
Milch cows, after 3d yr.	8 per cent.
Machinery and tools	6 to 10 per cent.

The thoughtful farmer will find no difficulty in adjusting these rates to suit his own conditions.

It will be found advisable to recheck the accuracy of the adopted rate of depreciation by making a complete revaluation every five or six years, or at any time when it is suspected that the rate is too inaccurate.

Written Exercise

Inventory, January 1, 1913

You will now record the annual inventory from the data given below. Review paragraphs on inventory in lesson 44, and also bear in mind the discussion on depreciation and valuation in this lesson. You will merely extend the amounts in the second column in the continuous inventory, which you provided in lesson 44, and add the improvements and implements recorded in the cash payments. There is only one other item to include, that of the County Growers' Stock, which is considered worth its cost. There is one due bill from Mr. Brown which was entered as cash, and is, therefore, included in the cash balance.

Real Estate. These items are the same as they were January, 1912, with the addition of improvements, including silo No. 2, as shown in the cash book.

Products. Wheat, 60 bu. at \$1; oats, 406 bu. at 45¢; barley, 222 bu. at 50¢; vetch, 22½ T. at \$10; clover, 22 T. at \$11; corn ensilage (estimated), \$189; potatoes, 243 bu. at 60¢; fruit and vegetables, \$66; artichokes, \$175; kale, \$50; wood and posts, \$205.

Live Stock. Horses: Brood mares, above 5 yr., 6, \$1100; driving horses, 3 yr., 2, \$275; colts, 5, \$650.

Hogs: Boar, 1, \$30; sows, 12, \$220; pigs, 50, \$300.

Cattle: Bull, 1, \$175; cows, 25, \$1500; heifers, 9, \$225, calves, 12, \$180.

Graded Sheep: 77, \$308.

Poultry: Chickens, 210, \$157.50; turkeys, 7, \$17.50; ducks, 5, \$4.25; geese, 3, \$4.50.

Implements: All items the same as January, 1912, with the additional implements purchased, as shown in the cash book. Note that tools and harness are added to by purchases during the year. All items are inventoried at cost, except those inventoried the previous year, which have depreciated 10%. From the total of implements as shown in the 1913 column deduct 10% of the total implements shown in the January, 1912, column, and the remainder will be the implements inventory January, 1913.

Miscellaneous. Supplies: nails, twine, oil, etc., \$32; County Growers' Association stock, \$20; cash and cash items, including bank balance, notes, and due bills, \$130.90.

Liabilities. Mortgage favor State School Fund, 6%, \$4000; interest due, \$40.

LESSON 49

SPECIAL COST RECORDS

Cost keeping is the most difficult of all phases of accounting, since it must deal with so many different and variable elements; and this is particularly true on the farm. There is scarcely a manufacturer in existence who has so many different problems to contend with as a farmer on a large scale, who is often at once the producer, the manufacturer, and the distributor. The farmer must contend, not only with the usual problems of material, labor, and capital, which enter into the processes of manufacture, but he must contend also with the caprices of the elements, with the uncertain conditions of the climate, soil, and other natural environment.

Fortunately, coöperation has done much to solve the problems of farm cost accounts. Cow-Testing Associations, Coöperative Creameries, Purchasing Agencies, and Fruit Exchanges are doing much of the intricate work necessary in accurate cost accounting. In the Cow-Testing Associations an expert makes the rounds among a certain number of farmers, usually once a month, tests the milk, examines the cows, prescribes rations, checks the records, and in countless ways directs the dairyman toward better methods and larger profits. In the exercises which follow, the details of testing individual animals are dispensed with, being attended to by the local Cow-Testing Association at the nominal cost of $1 per month.

In cost records, account must be taken of the material, labor, and capital used in production. The most difficult of the three is the labor record, since on the farm the laborers must often move from task to task several times in the day. Adding to this the natural disinclination of the farmer for figures, and the matter of keeping even approximately accurate cost records will be apparent.

It should be borne in mind that the cost records are wholly auxiliary to the financial records, and that the latter are complete without the former. However, it is not possible to keep accurate cost records without reliable financial records, because of the financial data which enter into costs.

The importance of the form of the records is often overlooked. In the first place, the form must be so arranged as to require the least amount of writing and the least expenditure of time to keep it up. It must also provide for the several elements of cost so as to guard against omissions and errors. Then the self-balancing and double-entry features must be present so that the several

accounts or columns in the financial accounts may check with corresponding columns in the cost accounts. In many cases the total of an account checks with a number of accounts in some other book, when the former is said to be the controlling account of the latter. And finally, the summaries must exhibit at a glance the information sought from the records and give in condensed form past experience as a guide in future operations.

In the cost records which follow, an account is kept with each crop, as indicated in the plot, lesson 45, and the acre is the unit of costs. An account is kept also of each kind of stock. Ordinary journal paper is used with a half-inch column to the left of the money column for man labor and another for team labor, as shown in illustration 38, page 150.

The details of the labor are found in the individual labor reports, illustration 36, page 146, and only the number of hours for each operation is entered in the cost account. Details of the feed consumed by the stock are found in the feed record, illustration 37, page 148, and only the total is entered in the cost accounts.

As explained in lesson 48, each crop is charged with depreciation of implements at the rate of 50¢ per acre, and, since the value of the land is $100 per acre, and the local interest rate is 6 per cent, each acre is charged with $6 interest on the capital invested. The stock is also charged with 6 per cent interest on the value of the barns for housing.

Each cost account is debited with the inventory at the beginning of the year and credited with what is left at the end.

The question of how manure is to be treated in the cost accounts requires careful consideration, since it is one of the most valuable assets on the farm if properly handled.

One of the most thorough discussions of the value of stable manure is found in Bulletin 122 of the Maryland Experiment Station. The average annual dry excretion per animal given on page 132 is: Cows, 10 tons; horses, 6 tons; hogs, 1 ton. These figures have been used in this exercise and the value has been estimated at $1.50 per ton delivered on the field. The amount of manure is as follows: Calves, heifers, and colts at one half the above estimate.

34 cattle	10 tons each	340 tons
10 horses	6 tons each	60 tons
100 hogs	1 ton each	100 tons
		500 tons

at $1.50 per ton, which totals $750. Dividing this by 246 acres of cultivated

land gives $3 per acre and $12 over. This $12 is charged to Orchard and Garden to avoid fractions. The chicken manure is used on the truck garden and is estimated at about $15 per year. The sheep are charged low pasturage and are, therefore, not credited with the manure.

It is thought that this distribution of the value of manure is more equitable and simple than to charge the particular field with the manure as it is applied, since the manure is used for the benefit of the whole farm. Of course, since the stock gets credit for the manure delivered on the field, the labor and depreciation of implements are charged to the stock.

An adjustment should be made in the rate of charge per acre, where the number of animals changes sufficiently to warrant it.

Written Exercise — *A*

Labor Report by H. M. Phillips, March, 1912

This labor report for one laborer for one month is given merely to show how the labor record may be kept. A form similar to the one shown in illustration 36 should be prepared for each laborer, and kept in a convenient place where he can enter the number of hours spent on each farm department each day. This is a simple matter, but to be of any value the report must be accurately kept. The proprietor may, if he prefers, keep this record himself, requiring each laborer to report to him each day.

Labor Report by H. M. Phillips March 1913

Rate 20¢ per hr.

Account	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total Man Team	Remarks
Cattle & Dairy						1						1											4									6	Cleaning, salting etc.
Horses																					3	9										12	
Hogs																2										2						4	
Sheep					1					1														1					1			4	
Poultry						1						3			3																	7	
Improvements																																	
Repairs						5	Horse barn					2									6	Machinery							3		16	5 General

Illustration 36

Note. — The following data contain the names of accounts, date in parenthesis, hours of man labor when only one number is given, and hours of man and horse labor when two numbers are given thus, 9–9.

Cattle and Dairy. Man labor (cleaning, salting, etc.), (March 6, raining) 1 hr., (12) 1, (23) 4; Horses, (21) 3, (22) 9; Hogs, (16) 2, (26) 2; Sheep, (5) 1, (10) 1, (24) 1, (29)1; Poultry, (6) 1, (12) 3, (15) 3; Improvements, 0; Repairs (General except as noted) (6) 5, (horse barn), (14) 2, (21) 6 (machinery), (30) 3; Wheat, man and horse labor (plowing) (26) 7–7; Oats (plowing), (1) 9–9, (2) 9–9 (3) 9–9, (5) 9–9, (7) 9–9, (8) 9–9, (9) 9–9, (10) 9–9, (13) 9–9, (14) 8–8, (15) 7–7 (16) 8–8, (17) 10–10, (19) 10–10, (23) 5–5, (24) 4–4; Orchard and Garden (6), 2, man labor (12) 5, (30) 5; Barley, man and horse labor (24) 4–4, (27) 9–9, (28) 9–9, (29) 9–9, (31) 9–9.

Extend the total number of hours under each account in the respective total columns, as shown in the illustration. The total number of hours will be 241 man, and 180 team hours. It is not necessary to extend this in terms of values, since this is done in the separate cost accounts, as shown in illustration 38. When all the labor records are compiled for the different men for the year, the amounts will correspond to those entered in the several cost accounts.

Written Exercise — *B*

Next reproduce the feed record as it was kept by student. Rule a sheet of blank paper found with your supplies to correspond to illustration 37, page 148. You need one line for each crop besides the headings. Be sure to have your teacher check the feed record before taking up the next lesson.

Feed Record, 1912

Wheat. Market price, $1 per bushel. Fed to chickens, 127 bushels. The poultry grain bin held 25 bushels and was filled five times with two additional bushels required. The feeder simply made a mark in the quantity column each time the bin was filled. The computation of value was made at the end of the year. Enter as in illustration 37.

Oats. Market price, 45¢ per bushel. Fed to cattle, 512 bushels. The cattle oat bin held 100 bushels and was filled five times, 12 bushels additional required. Fed to horses, 312 bushels. The oat bin for the horses held 100 bushels and was filled three times, 12 bushels additional required. Fed to poultry a little over 120 bushels, amounting to $54.15.

Barley. Market price, 50¢ per bushel. Fed to cattle, 170 bushels. The cattle barley bin held 50 bushels and was filled three times, 20 bushels additional

Feed Record, 1912

Feed	Cattle			Horses			Hogs			Sheep			Poultry		
	Quant.	Value		Quant.	Value		Quant.	Value		Quant.	Value		Quant.	Value	
Wheat bu 1.00													////+24 127	127	
Oats 45	////+15 512	230	40	///+12 312	140	40							120+	54	15
Barley 50	///+20 170	85		197-	98	40	565	282	50				85+	40	20
Vetch T. 10.00															
Clover 11.00															
Kale 2.50															
Corn Silage 3.50															
Rape Pasture @20.00															
Artichokes, 35.00															
Clover " Cost															
Field Peas " Cost															
Timber " 1.00 head															
Total															

(a) bin holds 100 bu. (b) bin holds 25 bu. (c) bin holds 50 bu.

Illustration 37

required. A little less than 197 bushels of barley were fed to the horses, amounting to $98.40. Fed to hogs, 565 bushels. Fed to poultry a little over 85 bushels, valued at $40.20.

Vetch. Market price, $10 per ton. Fed 26 tons to cattle. A little over 13½ tons were fed to the horses, amounting to $135.20. Fed 4 tons to sheep.

Clover. Market price, $11 per ton. Fed a little over 17 tons to cattle, valued at $188. A little over 13 tons were fed to the horses, amounting to $145.10. Fed 4 tons to sheep.

Kale. Estimated at $2.50 per ton. Fed 80 tons to cattle, 40 tons to hogs, and 10 tons to poultry.

Corn Silage. Estimated at $3.50 per ton. A little less than 51 tons were fed to cattle, valued at $178.

Rape Pasture. Estimated at $20 per acre. Hogs were pastured, estimated value $150. Fed to sheep, estimated value $70.

Artichoke Pasture. Estimated value $35 per acre. Fed to hogs about half the crop, estimated value $175.

Clover Pasture. Charged at cost. Charged to cattle, $262; horses, $74.80.

Field Peas Pasture. Charged to hogs, at cost, $156.50.

Timber Pasture. Pastured sheep, at $1 per head, $80.

LESSON 50

COST ACCOUNTS OF CROPS

In computing the number of tons of hay for the inventory the following simple rule may be employed: Subtract the width from the over (the "over" is the distance from the ground on one side over the stack to the ground on the other side); divide by two; and multiply by the width and then by the length. This gives the number of cubic feet in the stack. To find the number of tons, proceed as follows: For a stack 20 days old, or under, divide by 512; between 20 and 60 days old, by 422; over 60 days old, by 380.

To find the amount of hay in a mow find the number of cubic feet and divide by 512.

To find the number of bushels of grain in bins, take eight tenths ($\frac{8}{10}$) of the number of cubic feet. If the bin is large, add one third of a bushel for every 100 cubic feet.

The best practice is to keep the general grain supply separate from the feed supply. This can always be done by providing bins for the feed of each kind of stock, each holding, say, 10, 25, 50, or 100 bushels. Then by merely marking the number of times they are filled, the feed for the year is found accurately enough for all practical purposes. See illustration 37.

The dates at which the several operations occur vary widely in different localities and are, therefore, omitted from the memoranda. It will be an interesting exercise, however, for the student to insert the dates so far as he can secure them from home or other sources in his locality. It is often an excellent practice to add memoranda other than financial. Such data are often of even greater importance than the costs and returns.

Field 3a — Wheat — 12 Acres

			Labor M. hrs.	Labor T. hrs.	Dr.		Cr.	
1912 Jan. 1	Inventory				63			
	Harrowing		7	7				
	Seeding		8	8				
	Cutting		12	12				
	Shocking		12					
	Marketing		6	6				
	Plowing		33	33				
	Twine	C			2	40		
	Threshing 300 bu. @ 6¢	C			18			
	82 Sacks @ 10¢	C			8	20		
	Man Labor @ 20¢ an hr.		78		15	60		
	Team Labor "			66	13	20		
	Seed wheat				12			
	Interest & Depreciation 6% per A				7	8		
	Manure				36			
	Returns 300 bu. wheat @ 1.00 = $300							
	Sales	C					164	
	Fed to Poultry						127	
	Seed						12	
Dec. 31	Inventory						60	
					246	40	363	
	Profit				116	60		

Illustration 38

Written Exercise

Prepare 14 pages of journal paper by writing the headings of each crop in the same manner as in illustration 38. If not already provided with narrow columns for man labor and team labor, rule two extra columns each about $\frac{3}{8}$ inch wide. Then prepare each account from the memoranda which follow. The Wheat account is shown in illustration 38.

1. Wheat (Field 3*a*, 12 acres)

Note. — "C." means cash book entries.

Jan. 1. Cost — Inventory, $63; harrowing, man hours, 7, team hours, 7; seeding, 8–8; cutting, 12–12; shocking, 12–0; marketing, 6–6; plowing, 33–33; twine (cash), $2.40; threshing 300 bu. at 6¢ (C.), $18; 82 sacks at 10¢ (C.), $8.20; man labor at 20¢, (?); team labor at 20¢, (?); seed wheat, $12; interest and depreciation, (?); manure, at $3 per A., (?).

Returns — 300 bu. wheat at $1.

Disposal — Sales (C.), $164; fed to poultry, $127; seed, $12; Dec. 31, Inventory, $60.

Find the total cost, returns, and profit. See illustration 38.

2. Oats (Field 6, 52 acres)

Jan. 1. Cost — Inventory, $195.75; plowing, 143–143; harrowing, 39–39; sowing, 39–39; cutting, 45–45; shocking, 39–0; threshing, 10–0; hauling, 20–20; man labor, (?); team labor (?); twine (C.), $15.80; threshing 3120 bu. at 4¢ (C.), $124.80; seed oats, $33.60; interest and depreciation, (?); manure, (?).

Returns — 3120 bu. oats at 45¢.

Disposal — Sales (C.), $954; seed oats, $38.10; fed to cattle, $230.40; horses, $140.40; poultry, $54.15; Dec. 31, inventory, $182.70.

3. Barley (Fields 5*a* and 10, 33 acres)

Jan. 1. Cost — Inventory, $136.50; plowing, 91–91; harrowing, 16–16; sowing, 21–21; cutting, 33–33; shocking, 25–0; hauling, 14–14; man labor, (?); team labor, (?); twine (C.), $8.15; threshing 1155 bu. at 5¢ (C.), $57.75; seed barley, $28.30; interest and depreciation, (?); manure, (?).

Returns — 1155 bu. barley at 50¢.

Disposal — Sales, $68.60; fed to cattle, $85; horses, $98.40; hogs, $282.50; poultry, $40.20; seed, $28.30; Dec. 31, inventory, $111.

Submit your work for approval.

4. Vetch and Rye (Field 8, 35 acres)

Jan. 1. Cost — Inventory, $175; plowing, 96–96; harrowing, 26–26; sowing, 26–26; mowing, 31–31; raking, 18–18; stacking, 132–88; hauling 45–45; man labor, (?); team labor, (?); rye seed (C.), $12.25; vetch seed (C.), $63; baling 15 T. at $2. (C.), $30; interest and depreciation, (?); manure, (?).

Returns — 112½ T. hay at $10.

Disposal — Sales, $639.80; fed to cattle, $260; horses, $135.20; sheep, $40; Dec. 31, inventory, $225.

5. Clover and Timothy (Fields 4*a* and 9, 26 acres)

Jan. 1. Cost — Inventory, $121; mowing, 23–23; raking, 13–13; stacking, 98–64; hauling, 40–40; man labor, (?); team labor, (?); seed (C.), $31.20; baling 10 T. at $2 (C.), $20; interest and depreciation, (?); manure, (?).

Returns — 78 T. hay at $11.

Disposal — Sales, $359.90; fed to cattle, $188; horses, $145.10; sheep, $44; Dec. 31, inventory, $242.

6. Kale (Fields 3*b* and 4*b*, 6 acres)

Jan. 1. Cost — Inventory, 0; plowing, 19–19; harrowing, 6–6; disking, 6–6; harrowing, 6–6; marking, 6–0; transplanting, 220–0; cultivating, 54–30; harvesting, 240–120; man labor, (?); team labor, (?); interest and depreciation, (?); manure, (?); seed (C.), $3.

Returns — 150 T. kale at $2.50.

Disposal — Fed to cattle, $200; hogs, $100; poultry, $25; Dec. 31, inventory, $50.

7. Corn (Field 5*b*, 7 acres)

Jan. 1. Cost — Inventory, $73; plowing, 23–23; harrowing, 8–8; planting, 6–6; cultivation, 21–21; cutting, 11–11; hauling, 45–45; filling silo, 40–16; man labor, (?); team labor, (?); seed corn (C.), $2.70; twine (C.), $4.20; fuel

for engine (C.), $3.50; power machinery (C.), $11.20; interest and depreciation, (?); manure, (?).

Returns — 84 T. ensilage at $3.50.

Disposal — Fed to cattle, $178; Dec. 31, inventory, $189.

8. Rape (Field 1, 11 acres)

Jan. 1. Cost — Inventory, 0; plowing, 36–36; disking, 11–11; harrowing, 11–11; planting, 50–0; man labor, (?); team labor, (?); seed (C.), $2.55; interest and depreciation, (?); manure, (?).

Returns — Pasture at $20 per acre.

Disposal — Fed to hogs, $150; sheep, $70.

9. Artichokes (Field 2, 10 acres), (5 years)

Jan. 1. Cost — Inventory, 0; plowing, 33–33; harrowing, 6–6; disking, 11–11; harrowing, 6–6; cutting ($\frac{1}{5}$), 118–10; cultivating, 50–50; man labor, (?); team labor, (?); interest and depreciation, (?); manure, (?).

Returns — Pasture at $35 per acre.

Disposal — Fed to hogs, $175; Dec. 31, inventory, $175.

10. Clover Pasture (Fields 7 and 13, 34 acres)

Jan. 1. Cost — Inventory, 0; $\frac{3}{4}$ T. land plaster (C.), $11; application man labor, 14–0; interest and depreciation, (?); manure, (?).

Returns — Pasture charged at cost to horses, $74.80; cattle, $262.

11. Field Peas (Field 12*a*, 10 acres, pasture)

Jan. 1. Cost — Inventory, 0; plowing, 33–33; harrowing, 6–6; disking, 11–11; planting, 15–15; harrowing, 6–6; man labor, (?); team labor, (?); seed peas (C.), $28.60; seed oats, $4.50; interest and depreciation, (?); manure, (?).

Returns — Pasture charged to hogs at cost, $156.50.

12. Timber and Pasture (No. 11, 50 acres)

Jan. 1. Cost — Inventory, $162; cutting wood, 330–0; hauling wood, 205–140; man labor, (?); team labor, (?); interest and depreciation, (?).

Returns — 80 cords wood at $4; sheep pasture, $80.

Disposal — Sold posts and wood, $227; household use, $50; sheep pasture, $80; Dec. 31, inventory, $205.

13. Potatoes (Field 2*b*, 10 acres)

Jan. 1. Cost — Inventory, $150; plowing, 28–28; harrowing, 7–7; disking, 10–10; harrowing, 7–7; cutting and planting, 50–25; cultivating, 100–100; spraying, 50–0; gathering, 175–75; sacking, 50–0; hauling, 94–94; man labor, (?); team labor, (?); spraying material (C.), $2.50; 800 sacks at 5¢ (C.); seed potatoes, $64.20; interest and depreciation, (?); manure, (?).

Returns — 1500 bu. potatoes at 60¢.

Disposal — Sales, $815; seed potatoes, $64.20; household use, $25; Dec. 31, inventory, $145.80.

14. Orchard and Garden (No. 14, $1\frac{3}{4}$ acres)

Jan. 1. Cost — Inventory, $16; plowing and harrowing, 24–13; planting, 28–0; cultivation, 68–39; pruning, 25–0; spraying, 40–0; thinning, 20–0; harrowing and weeding, 8–2; picking and packing, 139–0; hauling and marketing, 52–33; man labor, (?); team labor, (?); seeds and plants (C.), $4.40; cuttings (C.), 75¢; boxes and sacks (C.), $28.70; twine and paper (C.), $5.20; spraying material, $2.90; interest and depreciation, $72; manure, $27.

Returns — 150 boxes apples at $1; 50 boxes pears at $1.20; 700 lb. strawberries at 5¢; 600 lb. blackberries at 5¢; 75 sacks onions, at $1.25; garden truck, $75.

Disposal — Cash sales, $333.25; household use, $60.50; Dec. 31, inventory, $66.

From records kept by Mrs. Phillips, and from careful estimates, it is agreed that the household used the following products from the orchard and garden: apples, $20; pears, $7.20; strawberries, $10; blackberries, $7.50; onions, $5; garden truck, $10.80; total, $60.50. Orchard and garden is credited and household debited for the total.

LESSON 51

COST ACCOUNTS OF LIVE STOCK

Exercise

The live stock cost accounts are prepared in exactly the same manner as the crop accounts and require no further directions. The memoranda for the year's work, omitting certain details, are given below.

Cattle and Dairy

Jan. 1. Cost — Inventory, $1940; feed record, $1403.40; labor record, 2800 hr. 20¢; veterinarian (C.), $7; membership Cow-Testing Association (C.), $12; interest on $1940 at 6 per cent; depreciation on dairy equipment, 20 per cent, $31.20; housing, 6 per cent on $1900.

Returns — Dairy sales, $1998.10; cattle sales, $300; 2 veals for home use, $20; skim milk, 120,000 lb. at 25¢ cwt.; manure, 340 T. at $1.50; milk for home use, $73; Dec. 31, inventory, $2080.

Horses

Jan. 1. Cost — Inventory, $1950; feed record, $593.90; labor record, 750 hr. at 20¢; shoeing (C.), $15; veterinary service (C.), $15; breaking colts (C.), $90; interest on $1950 at 6 per cent; depreciation on harness, etc., 20 per cent, $35; housing, 6 per cent on $1000.

Returns — Labor record crops, $426.40; labor record cash, $120; sold 3 colts at $125; manure, 60 tons at $1.50, $90; household use of driving horses, $80; Dec. 31, inventory, $2025.

Hogs

Jan. 1. Cost — Inventory, $565; feed record, $864; labor, 900 hr. at 20¢; skim milk, 110,000 lb. at 25¢ cwt.; interest on $565 at 6 per cent; depreciation and sire, 3 per cent on $250; housing, 6 per cent on $200.

Returns — Sales 25,000 lb. at 7¢; home use, 750 lb. at 7¢; manure, 100 T. at $1.50; Dec. 31, inventory, $550.

Crop Cost Summary, 1912

Field No.	Crop	Acr.	Total Dr.	Accounts Credited: Invent. 1911	Man Labor	Team Labor	Cash	Seed	Inter. & Deprec.	Manure
3a	Wheat	12	246 40	63	15 60	13 20	28 60	12	78	36
6	Oats	52	988 15	195 75	67	57 20	140 60	33 60	338	156
5a & 10	Barley	33	619 20	136 50	40	35	65 90	28 30	214 50	99
8	Vetch	35	753 55	175	74 80	66	105 25		227 50	105
4a & 9	Clover	26	482	121	34 80	28	51 20		169	78
	Total									

Illustration 39a

Poultry

Jan. 1. Cost — Inventory, $171.25; feed record, $246.35; skim milk, 10,000 lb. at 25¢ cwt.; labor record, 600 hr. at 20¢; interest on $171.25 at 6 per cent; housing, 6 per cent on $75.

Returns — Sales, 150 lb. chickens at 15¢; 360 lb. turkeys at 20¢; 200 lb. ducks at 20¢; 100 lb. geese at 20¢; Jan., 185 doz. eggs at 45¢; Feb., 235 doz. eggs at 40¢; Mar., 285 doz. eggs at 25¢; April, 260 doz. eggs at 20¢; May, 235 doz. eggs at 20¢; June, 210 doz. eggs at 25¢; July, 195 doz. eggs at 25¢; Aug., 160 doz. eggs at 30¢; Sept., 85 doz. eggs at 35¢; Oct., 45 doz. eggs at 40¢; Nov., 60 doz. eggs at 45¢; Dec., 110 doz. eggs at 50¢; home use (estimated), 240 doz. eggs at 25¢; 150 lb. chickens at 15¢; manure, $15; Dec. 31, inventory, $183.75.

Sheep

Jan. 1. Cost — Inventory, $320; feed record, $234; labor record, 100 hr. at 20¢; shearing 80 sheep at 10¢; interest on $320 at 6 per cent; housing, 6 per cent on $50.

Returns — Sales, 640 lb. wool at 20¢; 80 sheep at $3; 2 sheep at $5; home use, 2 sheep at $5; Dec. 31, inventory, $308.

Crop Returns Summary 1912

Crop	Total Cr.	Accounts Debited: Cash	Feed	Seed	Housekd.	Invent. 1912	Loss	Gain
Wheat	363	164	127	12		60		116 60
Oats	1599 75	954	424 95	38 10		182 70		611 60
Barley	714	68 60	506 40	28 30		111		94 80
Vetch	1300	639 80	435 20			225		546 45
Clover	979	359 90	377 10			242		497
Total								

Illustration 39b

LESSON 52

COST SUMMARIES

The cost summaries are merely recapitulations of what is found in the several cost accounts. They divide themselves naturally into first the two departments, Crops and Live Stock, and then each department shows the cost, returns, and the profit or loss. Take wheat, in illustration 38. The total cost is $246.40; enter in the total column of the summary, illustration 39 a, then the inventory, the labor, and the other items, as found in the cost accounts. The returns are treated in the same manner. When all the crop cost accounts have been entered and totaled, the net gain or loss for all the crops is found. Similarly for the live stock. Not only that, but it is seen that all the crops and all the returns for the stock are accounted for.

The records of any business are kept as means of control and guidance for its operations. From the cost summaries many lessons may be drawn by the farm manager. We shall not go into detail, but consider only two important questions. The first is regarding labor. From the several cost accounts, we see that 3799 man hours were expended on crops, and 2132 team hours. 5150 hours were devoted to the several branches of live stock. The total man labor expended on the productive end of the business was 8949 hours. Counting 300 working days to the year and ten hours per day gives 9000 hours for 3 men, which in-

Live Stock Cost Summary, 1912

Stock	Total Dr.	Accounts Credited						
		Invent. 1911	Man labor	Team labor	Cash	Feed	Inter. & Deprec.	Milk
Cattle & Dairy	4184	1940	560		19	1403 40	261 60	
Horses	3025 90	1950	150		120	593 90	212	
Hogs	1937 40	565	180			864	53 40	275
Sheep	604 20	320	20		8	234	22 20	
Poultry	577 35	171 25	120			246 35	14 75	25
Total								

Illustration 39c

dicates that the labor was well employed, even allowing for the occasional extra labor. On the other hand, the horses are credited with only 2132 hours' labor on crops and 600 outside labor. Even allowing for the time spent on general work and business trips, this would indicate that each team worked scarcely three hours per working day. The wisdom of using mares instead of horses is, therefore, apparent since a large share of the profit lies in raising colts.

The timber pasture shows a loss of $20. Even though this may be expected, and partly justifiable, it is subject for reflection. Perhaps it should be improved or put to better use.

If it be asked how it is that interest and depreciation is represented in the profit and loss statement as a gain, the answer is that it is merely what is called a "transfer entry" since it will be seen that the profits of crops and live stock have been reduced by a like amount. This was done to show the exact results of the several enterprises on the same basis, as if it had been done on borrowed capital.

Written Exercise

The student will now insert the headings on a sheet ruled like illustrations 39 a, 39 b, 39 c, and 39 d and complete the summaries by writing in the results in the several cash accounts. Having found the net gain, check it with your instructor before proceeding to the next lesson.

Live Stock Returns Summary 1912

Stock	Total Cr.	Accounts Debited: Cash	Milk	Horse Labor	Household	Manure	Invent. 1912	Loss	Gain
Cattle & Dairy	5281 10	2298 10	300		93	510	2080		1097 10
Horses	3116 40	495		4264 40	80	90	2025		90 50
Hogs	2492 50	1750			42 50	150	550		555 10
Sheep	696	378			10		308		91 80
Poultry	1062 25	781			82 50	15	183 75		484 90
Total									

Illustration 39d

LESSON 53

THE ANNUAL STATEMENT

The Annual Statement consists of summaries of the year's business, as shown in detail by the several records. Usually it consists of three parts, viz. (*a*) a statement of Resources and Liabilities, (*b*) a statement of Receipts and Payments, (*c*) a general statement of Profit and Loss. To this is added a summary of costs, returns, and profits of the several enterprises, where cost records are kept.

Besides the information the statement affords, it is of the greatest value in assisting the business man in forming an accurate judgment of the future conduct of his business.

Nothing will be of greater assistance in determining what records should be kept than the annual statement, since it will show the defect of the accounting system more clearly than anything else, and will often give a clew as to how the system may be simplified and perfected. In fact, it is a practice among expert accountants, first to outline the information desired in the form of an annual statement and then devise the records so as to afford the desired information.

The annual statement of Phillips and Student is exceedingly easy to prepare. (*a*) The inventory has been prepared already, and in its connection the other resources and also the liabilities are stated. (*b*) The financial statement is taken

directly from the totals of the cash book-ledger. (*c*) The profit or loss is found by taking the difference between the net worth now and that of a year ago. (*d*) The cost summaries are taken directly from the cost accounts; and (*e*) from the financial statement and the cost summaries the statement of profits and losses is made up. It exhibits the source of the profits and losses in totals, while the details are shown in the cost summaries. The correctness of the profit and loss statement is shown by the fact that the net gain or loss is the same as that shown in the resource and liability statement.

The student should bear in mind that he will probably be called upon, in later years, to prepare financial statements for publication. It may be in the capacity of corporation treasurer or as a public servant. In either case, it is highly important to know how to prepare a proper report so that it will be comprehensive and easily understood by the public. The form used in this exercise is often seen in public reports.

Written Exercise

On a sheet of journal paper prepare a statement of receipts and payments in the following form, and submit it to your teacher for approval:

Financial Statement, Year ended Dec. 31, 1912

RECEIPTS

Balance on hand, Jan. 1		_____	
Farm crops	_____		
Orchard and garden	_____		
Wood and posts	_____		
Total crops		_____	
Cattle and dairy	_____		
Horses	_____		
Hogs	_____		
Sheep	_____		
Poultry	_____		
Total stock and dairy		_____	
Interest		_____	
Total receipts			_____

PAYMENTS

Stock and dairy	_____
Crops	_____
Man labor	_____
Improvements	_____
Implements	_____
Repairs	_____
General expenses, interest and taxes	_____
Bills Payable	_____
County Growers' Association, stock	_____
Balance on hand	_____
Total payments	_____

Statement of Profits and Losses

PROFITS

Crops, as per summary		_____
Live stock, as per summary		_____
Interest and depreciation charged to crops and live stock	_____	
Less 10% on implements	_____	_____
Interest received (cash)		_____
Increase in supply inventory (inventory)		_____
Decrease in liability interest and labor (inventory)		_____
Total		_____

LOSSES

Labor, as per cash book	_____	
Less charged to crops and stock summaries	_____	_____
Household (crop and stock summaries)		_____
Repairs (cash)		_____
General expenses (cash)		_____
Net profit		_____
Total		_____

PROOF

Net worth as per inventory _____
Net worth last year inventory _____
Net profit _____

LESSON 54

REVIEW QUESTIONS

On Farm Set II

1. Why is the inventory the most important record on the farm?
2. What should be included in the inventory and what should not be included? Discuss.
3. Explain a convenient method of taking the inventory.
4. Describe the continuous inventory and explain its advantages.
5. What is the advantage of organizing the business into departments?
6. Discuss the advantage of several dates in taking the farm inventory.
7. What is your own opinion on the subject?
8. Describe a method of either reducing or enlarging the plot of a farm.
9. What is the object of the farm plot from the accountant's point of view?
10. State a convenient scale in drawing acreage.
11. How may farming be reduced to a strictly cash business?
12. Discuss the advantage of discounting bills, and illustrate by a simple example.
13. How are the terms of dealers' bills indicated?
14. Explain the importance of paying definite items whenever it is practicable rather than to pay on account.
15. What is the advantage of depositing all moneys received and paying all bills by check?
16. How should petty cash be handled?
17. How is the cash balanced?
18. How may the voucher be made to take the place of itemized statements in the cash book?
19. If sales are made on time, how may they be regarded as cash items?
20. Explain the several headings of the distribution columns.
21. What advantage in forwarding the totals from page to page rather than the balance?
22. How should columns having a number of classes of entries be segregated?

23. Explain the method of filing vouchers.

24. Explain the voucher check and its advantages.

25. Why are household and personal expenses excluded from the business accounts?

26. What important questions arise in connection with the annual inventory?

27. On what does the actual value of any business depend? Illustrate.

28. Why does sentiment sometimes influence the valuation of property?

29. Is this legitimate? Why?

30. What value should be placed on stock and farm produce?

31. Define depreciation and point out four causes.

32. Give a simple example showing the method of computing depreciation.

33. How is depreciation the result of new inventions and of style? Discuss.

34. Explain four practical methods of computing depreciation.

35. Why is it impracticable to fix a satisfactory rate of depreciation from live stock?

36. Explain the methods of fixing depreciation from implements and how may this be applied to crops in cost accounts?

37. What difficulties in fixing permanent rates of depreciation?

38. Give some rates of depreciation which are commonly used.

39. How should the rate be corrected?

40. Why is cost keeping the most difficult of all phases of accounting?

41. What agencies are coöperating with the farmers in this subject?

42. What difficulties in the way of computing exact labor records?

43. Discuss the relations between financial records and cost records.

44. Give several reasons why the form of records is important.

45. Discuss the basis upon which the interest to be charged against the crops is found.

46. Why are the inventories debited at the beginning of the year and credited at the end?

47. Give several reasons why barn manure is an important subject.

48. Prepare a statement for the next recitation of how this is handled on some farm you know.

49. Prepare an example illustrating a simple rule for finding the amount of hay in a stack. In a mow. (You will find it more interesting to take an actual stack or an actual mow if one is accessible.)

50. Discuss two methods of computing the number of bushels in grain bins and bring in an illustrative example.

51. Describe the process of preparing the cost summaries.
52. How are they balanced and proved?
53. What important conclusions may be drawn from these summaries?
54. Discuss several besides those discussed in the lesson.
55. Explain how interest can be a profit.
56. Has any one paid this to the firm? If so, why?
57. Discuss fully the annual statement, its form and importance.
58. How is the statement prepared?

LESSON 55

FARM IMPLEMENT BUSINESS

It is the object of this set to acquaint the student with a method of keeping books suitable for any ordinary mercantile business. The books of original entry used are journal, cash book, purchase book, and sales book.

All cash transactions will be entered in the cash book — cash received on the left page, and cash paid out on the right page, as shown in illustration 40, pages 166 and 167. No cash account will be kept in the ledger as all cash debits and all cash credits appear in the cash book, and the difference between the two sides of the cash book will be the cash balance. The cash book is in reality a detached ledger account. In making a trial balance, therefore, the cash balance will be taken from the cash book.

You will note that when cash is received, cash is debited by making your entry on the debit, or left, side of your cash book, and the account to be credited is written in the column indicated by the heading. When cash is paid out, cash is credited by making the record on the credit, or right, side of the cash book, and the account to be debited is written in the appropriate column as indicated by the heading.

All sales will be entered in the sales book, except small cash sales, as in illustration 41, page 168. At the end of each month the total of the sales for the month is carried to the credit side of the merchandise account in the ledger as in illustration 41, page 168. Each person whose name appears in the sales book will be debited in the ledger for the amount of his purchase. Since merchandise is credited only once a month instead of each time a sale is made, much space is saved in the merchandise account and much time is saved in posting the sales entries. Another advantage of the sales book is that from it one can ascertain the total sales for each month, or for any period that may be desired.

All purchases are entered in the purchase book as in illustration 42, page 169. The total of the purchase book is carried once a month to the debit side of the merchandise account in the ledger as shown in the illustration on page 169. Each purchase is credited to the account of the person of whom it was purchased. By this method of recording purchases, time and space are saved, as was explained in connection with the sales book.

All transactions, except sales, purchases and cash transactions are recorded in the journal, in the form shown in illustration 10, page 38.

Cash Received

Date	Folio	Account to be Credited	Explanation	Amounts		Total	
1913 Jan. 2	✓	Cash on hand		2800			
3		Mdse.	Cash sales	151	16		
5		George Roe	Invoice of today	282	40		
8		Bills Rec.	Brown's note due today	200			
10		Walter Warren	On account	50			
14		James Hanna	Invoice of today	163	75		
19		Mdse Discount	On Excelsior Tool Co's inv.	4	50		
20		Bills Rec.	Gray's note due today	500			
20		Interest	On Gray's note	2	50		
26		George Harris	In full of acct.	37	50		
30		M. D. Barber	Inv. of 2nd less 2%	200			
31		Bills Rec.	Disct'd Ames note at bnk.	100		4491	81
						4491	81
Feb. 1		Balance	On hand	3201	41		

Illustration 40

Cash Paid Out

Date	Folio	Account to be Debited	Explanation	Amounts		Total	
1915 Jan.	2	Expense	Rent for Jan.	100			
	3	"	Books & Stationery	38	90		
	7	H. M. Stanton Co.	Invoice of today	280			
	9	C. F. Raines	On account	100			
	11	Bills Payable	My note favor Smith	200			
	13	Expense	Pd. Journal's Adv. bill	27	60		
	15	Fur. & Fixt.	Bot. office desk	48	50		
	19	Excelsior Tool Co.	Inv. of 3rd less 3%	150			
	20	R. W. Gilder	In full of acct.	69	40		
	30	Mdse. Disct.	On Barber's Inv.	4			
	31	Discount	On Ames note 30 da.		50		
	31	Expense	Salaries	120			
	31	Bills Payable	Bowen note with int.	150			
	31	Interest	On Bowen note	1	50	1290	40
	31	Balance	On hand (Red Ink)			3201	41
						4491	81

Illustration 40

Sales Book

January 2, 1913.

Folio				
10	William Walworth On acct.			
	2 Spring Tooth Harrows @ 25	50		
	1 Wheel Plow 30	30		80
	3			
12	Henry Ward 30 day note			
	1 Cultivator	25		
	1 Spraying Outfit	15		40
	16			
13	B. W. Haines. ½ Cash ½ Acct			
	1 Grain Drill	55		55
	20			
8	Charles Slocum Cash			
	2 Garden Rakes @ 75¢	1	50	
	2 Hoes @ 40¢		80	
	2 Spading Forks @ 50¢	1		3 30
	25			
9	B. A. Howell On acct, 60 days			
	1 Cream Separator	90		90
3	Mdse. Cr. Total Sales			268 30

Illustration 41

Purchase Book

Date & Invoice		Folio	Acct. to be Credited	Terms	End of Disct. Period		Due		Amount		When Paid
1912 Jan.	3		Johnston & Co.	30 days			Feb.	2	289	70	
	5		Excelsior Tool Co.	2/10, 60 da. Net	Jan.	15	Mar.	6	640		Jan. 15
	8		M. D. Brown	3 mos. note			Apr.	8	1121	60	
	9		Smith Walker	On acct.					482	10	
	12		Gray Bros.	1/30/3 mos. Net	Feb.	11	Apr.	12	180		
	3		Mdse. Dr.	Total					2713	40	

Illustration 42

George Watson has decided to purchase the farm implement business of James Grayson, 389 West Main St., in your city. As a result of negotiations Mr. Grayson has offered to sell his business to Mr. Watson, including stock, fixtures, and good will, for $ 5000 in cash. The latter accepts this offer and it is agreed that Mr. Grayson is not to enter into competition with Mr. Watson for a period of ten years. By "good will" is meant, the established trade of a business and one who sells his "good will" either expressly or impliedly agrees to do nothing to attract his old customers away from the business he is selling.

A new lease of the store has been taken, and a monthly rental of $ 50 is to be paid Charles Sumner, the owner.

Student has been engaged to keep the books and take charge of the other office duties at a monthly salary of $ 50.

Walter Williams has been hired to clerk in the store at a weekly salary of $10.

When sales are made a sales slip is made out by the one making the sale. One copy goes to the customer and the other is filed numerically. If reference is made to the sales slip number in the books it is generally unnecessary to copy the items into the sales book.

Invoices of merchandise bought are checked up and approved by Mr. Watson, and then turned over to the bookkeeper who enters and files them. Memoranda giving all necessary details of the day's transactions will be furnished the bookkeeper each day.

Mr. Watson makes all payments and attends to all financial matters.

All money will be deposited, and all payments will be made by check.

R. E. Davidson was employed to make an appraisal of the stock, and store fixtures and he has submitted the following report which has been approved by Mr. Watson:

Merchandise —

1 wheel plow	$35.	$35.
4 walking plows	12.	48.
3 spring tooth harrows	15.	45.
5 cultivators	8.	40.
3 wide tire trucks	75.	225.
2 wagon boxes	18.	36.
6 spring seats	2.	12.
2 grain drills	110.	220.
1 grain binder	120.	120.
1 corn binder	100.	100.
1 straight tooth drag	12.	12.
1 disk harrow	35.	35.
2 shovel plows	3.	6.
2 manure spreaders	150.	300.
2 mowers	40.	80.
2 hay rakes	25.	50.
3 hay forks — complete	25.	75.
1 steel roller	24.	24.
2 potato diggers	130.	260.
1 hay tedder	35.	35.
1 corn harvester	100.	100.
1 ensilage cutter	40.	40.

1 stump puller	150.	150.
1 spraying outfit	15.	15.
25 milk cans	1.50	37.50
2 corn shellers	10.	20.
3 farm scales	15.	45.
2 seed cleaners	40.	80.
hand tools		450.60
Total at list prices		$ 2696.10
Less 20 per cent		539.22
		$ 2156.88
Furniture and Fixtures —		
1 roll top desk	$ 30.	$ 30.
1 bookkeeper's desk	48.	48.
1 flat-top desk	18.	18.
1 safe	125.	125.
3 showcases	20.	60.
8 chairs	3.	24.
1 counter — 12 ft.	35.	35.
5 sections — top and base — files	3.50	17.50
1 Underwood typewriter	75.	75.
1 table	8.	8.
miscellaneous items		38.
		$ 478.50

It is customary in beginning a business to write a complete explanation that will show all the important facts regarding investment, employees, salaries, rent, etc. From the data given above write an appropriate explanation on the first page of your journal.

Mr. Watson invests $ 3000 in addition to the $ 5000 paid Mr. Grayson.

As all outstanding accounts on the books of James Grayson are to be collected by him personally, the only opening entry necessary in Mr. Watson's books will be a journal entry as follows:

√ Cash	$ 3000.	
Mdse.	2156.88	
Furniture and Fixtures	478.50	
Good Will	2364.62	
George Watson		$ 8000.

The cash is checked in cash book and journal so that it will not be posted. It should be entered on the debit side of the cash book as "cash on hand."

TRANSACTIONS

1 — Jan. 2 — Paid Hiram Walker one month's rent by check.

2 — Jan. 3 — Paid R. E. Davidson for appraisal services, $5.

3 — Jan. 4 — Paid City Book Store's invoice for books, stationery, and office supplies, $122.60.

4 — Jan. 5 — Paid the Rural Weekly Journal's bill for printing announcements of the purchase of the business by Mr. Watson, $10.50.

5 — Jan. 6 — Sold Arthur Hillman a wide-tire truck for cash, $75. (Sales book and cash book.)

6 — Jan. 7 — Sold hand tools and miscellaneous articles for cash, $76.80. (Cash book.)

7 — Jan. 8 — Sold to J. F. Painter, one cultivator, $8; 1 walking plow, $12; 1 wagon box, $18. Received one half in cash and 4 months' note for the balance. (Sales book, cash book, and journal.)

8 — Jan. 9 — Bought of Excelsior Tool Co., Mobile, Ill., invoice of Jan. 5, 1 disk harrow, $28; 1 straight tooth-drag, $10. Terms, 5 per cent 30 days, 4 months net. (Purchase book.)

9 — Jan. 11 — Bought of Farmers' Supply Co., Fort Wayne, Ind., invoice of Jan. 9, 1 doz. plow points at $12; 2 doz. steel hoes at $3.60; $\frac{1}{2}$ doz. steel spades at $7.20. Terms, on account, 30 days.

10 — Jan. 12 — Sold to Wallace Carter on account, 1 manure spreader, $150; 1 shovel plow, $3; 1 potato digger, $130.

11 — Jan. 14 — Cash sales of small hand tools to date, $62.80.

12 — Jan. 15 — Paid Walter Williams two weeks' salary by check.

13 — Jan. 16 — Sold Harvey Cross on account, 1 spring seat, $2; 1 wagon box, $18; 1 corn harvester, $100; 1 manure spreader, $150.

14 — Jan. 18 — Sold Warren Sterling on his 3 months' note, 1 grain drill, $120. (Sales book and journal.)

15 — Jan. 21 — Bought of General Farm Implement Co., Dayton, Ohio, invoice dated Jan. 18, 3 cream separators at $30. Gave check for one half, and 3 months' note for the balance. (Purchase book, cash book, and journal.)

16 — Jan. 25 — Cash sales of small tools reported by Mr. Williams, $96.75.
17 — Jan. 27 — Sold George Granger on his 30-day note, 1 wheel plow, $35; 1 spraying outfit, $15.
18 — Jan. 29 — Sold James Harrison on account, 2 walking plows at $12; 1 spring-tooth harrow, $15; 1 wide-tire wagon truck, $75; 1 hay rake, $25.
19 — Jan. 31 — Cash sales to date, $89.75.
20 — Jan. 31 — Paid Strong Carting Co. by check, for cartage during the month, $15. (Debit Freight & Cartage.)
21 — Jan. 31 — Paid S. Wood, bookkeeper, salary for month by check.
22 — Jan. 31 — Paid Walter Williams two weeks' salary by check. You will now close your cash book, as in illustration 40.

Submit your cash book to your teacher for approval.

Posting

Open accounts as follows: George Watson, Prop., one fourth page; Merchandise, one half page; Bills Receivable, Bills Payable, Expense, Furniture and Fixtures, each one third page; all other accounts one fourth page.

Post the journal entries for January in the same manner as you have done in the preceding exercises. Remember to post all debits first and then all credits; also remember to place the page of the ledger account in the folio column at the left of each entry in the original entry books when you post.

Post each sale in the sales book to the debit of the person to whom the sale was made, and the total sales for the month to the credit of merchandise, as indicated in illustration 41, page 168. Remember that all accounts on the left-hand side of the cash book are to be credited for their respective amounts, and all accounts on the right-hand side of the cash book are to be debited for the amounts indicated.

After completing your posting, foot all the accounts in the ledger, and ascertain the balance of each account by subtracting the smaller from the larger side in pencil figures on the side of the account which is the larger, as in illustration 11, pages 41, 42, and 43. Make a trial balance, using balances.

Submit your trial balance to your teacher for approval.

TRANSACTIONS — *Continued*

23 — Feb. 1 — Paid Hiram Walker rent for Feb.

24 — Feb. 1 — Paid Lehigh Coal Co.'s bill for coal, $70.

25 — Feb. 3 — Sold Walter Jones on his 60-day note, 1 corn sheller, $10; 1 farm scales, $15.

26 — Feb. 4 — Paid Excelsior Tool Co.'s invoice of the 5th ult. less 5 per cent discount.

27 — Feb. 5 — Sold Warren Sterling for cash, 1 cream separator, $40.

28 — Feb. 6 — Bought of Central Tool Co., Madison, Wis., invoice of Feb. 1, 2 walking plows at $10; 2 wagon boxes at $15; 1 wide tire truck, $60. Terms, $\frac{2}{10}$, $\frac{1}{30}$, n/60.

29 — Feb. 8 — Paid Walter Williams one week's salary by check.

30 — Feb 8 — Paid Farmers' Supply Co.'s invoice of the 9th ult. due to-day by check.

31 — Feb. 10 — Paid freight bills by check, $61.30. (Debit Freight & Cartage.)

32 — Feb. 11 — Paid Central Tool Co.'s invoice of the 1st inst. less 2 per cent discount by check.

33 — Feb. 11 — Paid Home Electric Light Co.'s bill for January by check, $6.50.

34 — Feb. 12 — Cash sales of small items to date, $186.90.

35 — Feb. 14 — Bought of the A. B. Granger Co., Kansas City, Mo., invoice of Feb. 10, 1 manure spreader, $120. Terms, 60-day note.

36 — Feb. 15 — Sold James Harrison 10 milk cans at $1.50; 1 steel roller, $24; 1 hay fork — complete, $25. Received cash in full.

37 — Feb. 17 — Sold James L. Bristol, 1 grain drill, $110; 1 grain binder, $120. Received one half in cash and note at 3 months for the balance.

38 — Feb. 18 — Paid Walter Williams one week's salary by check.

39 — Feb. 20 — Discounted James L. Bristol's note of the 17th inst. at the State Bank and received credit for the proceeds.

40 — Feb. 22 — Cash sales of small tools to date $169.40.

41 — Feb. 23 — Sold David Mason on account 1 stump puller, $150; 1 seed cleaner, $40; 1 potato digger, $130.

42 — Feb. 25 — Paid my note of the 14th inst., favor of A. B. Granger & Company, less discount to maturity.

43 — Feb. 26 — Received cash from George Granger for his note of the 27th ult. due to-day.

44 — Feb. 27 — Received cash from James Harrison to apply on account, $ 50.
45 — Feb. 28 — Sold Walter Jones, on 3 mos. note, 1 manure spreader, $ 150.
46 — Feb. 28 — Bought of Henry Clay & Son, St. Paul, Minn., 1 steel roller, $ 20; 1 spraying outfit, $ 12. Terms, on account.
47 — Feb. 28 — Paid Walter Williams one week's salary by check.
48 — Feb. 28 — Paid S. Wood, bookkeeper, salary for month.
49 — Feb. 28 — Paid Strong Carting Company, by check, for cartage during month, $ 19.50.

You will now post the cash book, sales book, purchase book, and journal exactly as you did at the end of the preceding month. Check your posting.

Balance your cash book as you did at the end of January.

Find the balance of each account in your ledger, making the computation in lead pencil on the larger side of each account. Then make a trial balance, using the balances.

You will now submit your trial balance and books of original entry to your teacher for approval.

When they are returned you will make out statements of resources and liabilities and losses and gains exactly as you did in lesson 14. The inventories are as follows: Merchandise $ 1043.10, Furniture & Fixtures $ 158.67, Expense $ 180.

After you have completed the statements you will close your ledger as you did in lessons 15, 22, 23. Remember that the inventories are all resource inventories and therefore should be entered, first on the credit side of their respective accounts, and then on the debit side after the accounts have been closed.

Compare the present worth which was obtained in your statement of resources and liabilities with the present worth obtained by closing the loss and gain accounts in the ledger.

Close all personal accounts, except those with only one entry.

Hand your work to your teacher for approval.

LESSON 56

REVIEW QUESTIONS

Lesson 55

1. In what ways does the "mercantile" business differ from the farm business?

2. What books of original entry are used in this set?
3. Where were all the cash transactions entered? Why?
4. Why was no cash account kept in the ledger?
5. In making the trial balance where was the cash balance obtained?
6. If you were told that in recording a given transaction cash must be debited in the cash book, on which side would you make the record? Why?
7. Where and how were all sales entered in this set?
8. Explain the advantage of the sales book. The cash book.
9. Where and how were the purchases entered?
10. Explain the advantage of the purchase book.
11. What use is made of the journal in this set?
12. What is a sales slip and how is it used?
13. What are an appraiser's duties?
14. What record should be made on the first page of the journal before entering any of the transactions?
15. Explain how the cash is proved.
16. Explain how the cash book is closed.
17. How is the cash book posted? The sales book? The purchase book?
18. In closing your ledger what did you do with the resource inventories?
19. In what two ways did you ascertain the present worth?
20. What is the object of closing the ledger at stated periods?

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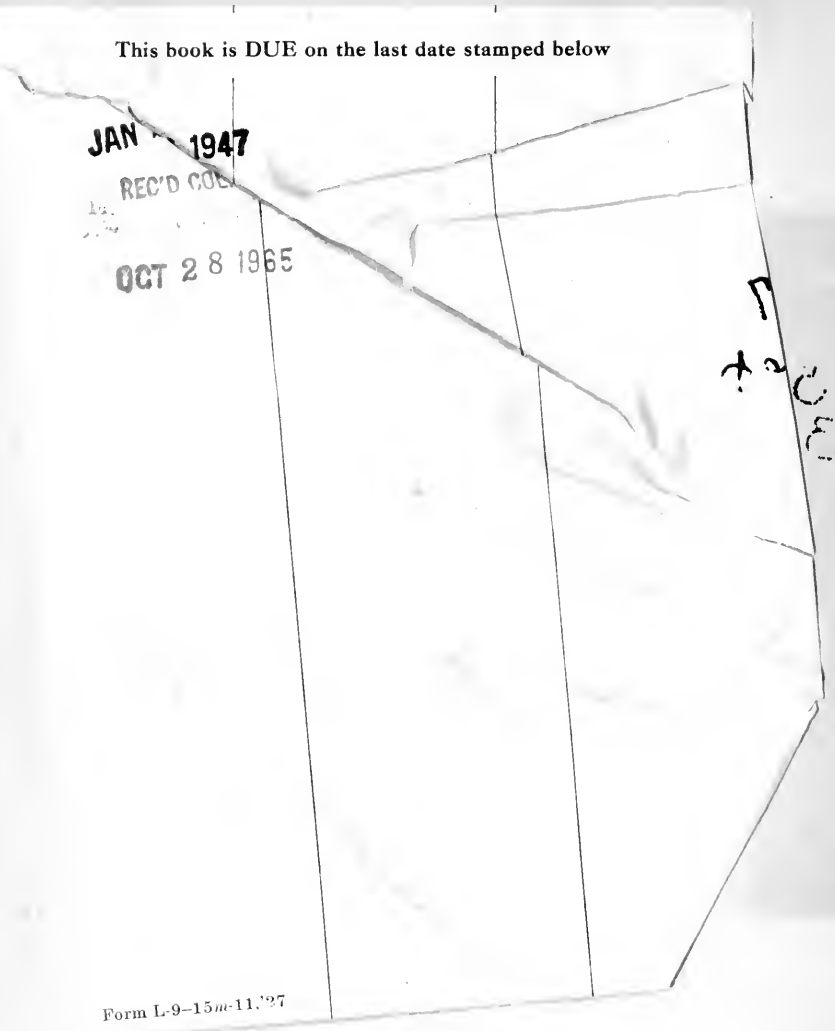

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